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# PROGRESS REPORT

OF

# FOREST ADMINISTRATION

IN

# AJMERE-MERWARA

FOR

# 1887-88.

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BY

J. E. BARRETT, ESQ.,
ASSISTANT CONSERVATOR OF FORESTS.

WITH A REVIEW BY THE CHIEF COMMISSIONER,

AND

ORDERS BY THE GOVERNMENT OF INDIA.

CALCUTTA:
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1889.

No. 126 F., dated Simla, the 17th May 1889.

*From*—SIR E. C. BUCK, *Secretary to the Government of India,*

*To*—*The Chief Commissioner of Ajmere.*

I AM directed to acknowledge the receipt of your letter No. 3637 S., dated the 14th September last, submitting the Report on Forest Administration in Ajmere for 1887-88, with remarks thereon by the Commissioner of Ajmere-Merwara and your Resolution, and to communicate the following observations.

2. The area of State Reserves, aggregating 139 square miles, amounts to 5 per cent. of the whole area of the Province, which contains 2,711 square miles, and there seems to be no prospect of this proportion being further increased.

It is evident that the State Forests alone are insufficient to fully supply the requirements of the country in regard to forest-produce, especially as the forests are year after year exposed to extensive grazing, which of necessity retards their development. It is satisfactory, therefore, to learn that two more villages have asked that a portion of their waste-land should be set apart for Forest Reserves. The importance of such voluntary reservation is great, and the measure deserves every encouragement that can be given it.

The Forest Officer has apparently misunderstood the legal position of these voluntary Village Reserves, which are quite outside the provisions of the Ajmere Forest Regulation, VI of 1874. The Government of India is satisfied for the present with the arrangement made for the working of the Makhupura Village Reserve, and approves of the Commissioner's instructions in respect of the protection of village forests and grazing grounds, which, it is understood, are properly demarcated. But whenever the village community or zemindar consents, it may be preferable to declare such land to be a State Forest on the condition that it will be disforested and surrendered upon reasonable notice after a certain term of years. In such a case it will be desirable that some previous understanding as to the Rules to be made under section 9 should be arrived at.

3. The position of the Ajmere Forest Reserves and the character of the local agricultural customs has necessitated the fencing, as well as the demarcation, of Government forest areas, in order to prevent illicit grazing. Fencing has hitherto involved an annual charge of several thousands of rupees, and it is, therefore, noticed with satisfaction that fencing operations have been now completed, and that in future the revenue will be burdened only with the maintenance of existing fences.

4. Both the general protection of the forests against offences, as well as the special measures for the exclusion of forest fires, seem to have been successful; but large numbers of cattle had again to be admitted on account of the more or less chronic failure of the fodder-supply outside the Forest Reserves. The rains of 1887-88, however, appear to have been favourable, and natural reproduction is said to have been fairly good in spite of the excessive grazing at the beginning of the year. Artificial reproduction cannot be dispensed with in Ajmere, and, though not likely to recover during the first rotation, the expenditure which it entails is necessary not only for the improvement of the character of the future forest, but often for its very re-establishment on more or less barren areas. It is satisfactory that the efforts in this direction have been successful.

5. The departmental exploitation of the forests was confined to the cutting of 136 acres for coppice in the Chang Block, and to the preparation of a small quantity of charcoal in Todgarh. These operations were fairly remunerative, showing a net profit of 47 per cent. The quantity of wood removed by departmental agency is estimated to amount to less than 65,000 cubic feet. No estimate is given of the quantity extracted by purchasers; but, judging from the amount of revenue realised, it may be safely accepted that the total yield was less than 2 cubic feet per acre of Reserved Forests.

6. The chief income was derived from grass and grazing. The revenue under this head amounted to R7,524; but the importance to the agricultural population of the reservation of the areas can be gauged by the fact that nearly half a lakh of rupees worth of cut grass was removed from the forests free of charge.

7. Though the financial results are, under the circumstances explained, no criterion of the success of Forest Administration in Ajmere, it has been noticed with satisfaction that the gross revenue has increased during the year under review, and the annual deficit been materially reduced.

8. His Excellency the Governor General in Council agrees with you as to the importance of developing the forests in Ajmere-Merwara, and directs me to convey the thanks of the Government of India for the interest you have taken in this branch of the administration.

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BENGAL SECRETARIAT LIBRARY

# PROGRESS REPORT

OF

# FOREST ADMINISTRATION IN AJMERE-MERWARA, 1887-88.

No. 3637S., dated Mount Abu, 14th September 1888.

From—Major G. F. L. MARSHALL, R.E., Secy. to the Chief Commr. of Ajmere,

To—The Secretary to the Government of India, Revenue and Agricultural Dept.

I am directed, by the Chief Commissioner of Ajmere, to submit herewith the Annual Report of Forest Administration in Ajmere and Merwara for the year 1887-88, accompanied by the Chief Commissioner's Resolution thereon.

*Extract from the Proceedings of the Chief Commissioner of Ajmere, in the Public Works Department, No. 3636S., dated 14th September 1888.*

READ—

Progress Report of Forest Administration in Ajmere and Merwara for the year 1887-88, by Mr. J. E. Barrett, Assistant Conservator of Forests, with a review thereof by the Commissioner of Ajmere and Merwara, received under cover of Commissioner's letter No. 85F., dated the 16th August 1888.

Area and Boundaries.

RESOLUTION.—There was no change, during the year under report, in the total area of Forest Reserves in Ajmere and Merwara, which was 139 square miles, as shown in the last Report.

2. In the last Report the area of Reserves in the istimrardar and jagir villages was shewn as 20,500 acres, but now it is reported that the actual area is 19,648 acres. It was reported last year that istimrardars and jagirdars were very reluctant to give any information regarding their Reserves to the Forest Officer. The Chief Commissioner hopes that this reluctance will in time disappear.

3. The entire misapprehension by the Assistant Conservator of his position and duties regarding Village Reserves has been very unfortunate, in that it has tended to check the development of an experiment from which much benefit is anticipated. The Chief Commissioner trusts that the Assistant Conservator will in future follow strictly the instructions given by the Commissioner in this matter, and do his best to give effect to the wishes of Government. The zamindars of two more villages are said to have come forward during the year and set aside portions of their waste land for Forest Reserves, thus showing that they realize the advantages to be derived. The Government of India particularly wishes that such Reserves should be encouraged as far as possible (as will be seen from paragraph 3 of Government Resolution No 411F. of 10th April 1888), and the Assistant Conservator should give this important subject his earnest attention.

4. *Village Birs.*—The area of village birs in the Merwara District is reported to be 5,074 acres. The area of birs in the Ajmere District is not given. It was at first thought that the working of these Reserves required to be changed, but as the Assistant Conservator has now pointed out that any interference in the present arrangement of birs is likely to be injurious, the Chief Commissioner thinks that the matter may be dropped for the present.

5. Ten new boundary pillars were erected, and 1,236 running feet of fencing and 56,135 running feet of dry-stone wailing were constructed during

the year. The total cost of fencing is said to have been R1,493-1-3 during the year.

6. The total length of fencing constructed up to end of March 1888 is reported to be 689,773 running feet, and its cost R15,809, or R1 per 44 running feet.

7. On the whole, the work of protection and demarcation was carried out satisfactorily. The Government of India, in the review of the last Report, asked that an estimate of any further length of boundary which is considered necessary to fence may be prepared. The Assistant Conservator does not consider it necessary to fence any more length of boundary, and no estimate is, therefore, required.

Record of Rights.

8. This important document has been completed, and a copy of it has been forwarded to the Assistant Conservator for information and guidance.

Surveys and Annual Plans-of-Operations.

9. The work of survey was done fairly. As usual, the forest operations were carried out on a preconcerted plan, and the forecast was, with some few exceptions, adhered to.

General Protection and Breaches of Forest Rules.

10. The number of convictions for breaches of forest rules, during the year under report, was greater than that of the previous year. The total convictions numbered 228, against 193 during 1886-87. Out of this number, 188 were compounded by the Assistant Conservator of Forests. The cause of the increase in the number of convictions is not stated. The number of convictions before a Magistrate is distributed as follows :—

| | 1886 87. | 1887-88. |
|---|---|---|
| Ajmere . . . . . | 30 | 16 |
| Merwara . . . . . | 45 | 24 |

The offences are reported to be mostly of a petty nature.

11. The number of cattle impounded for trespass on forest grounds was much less than that of the previous year—namely, 2,924 against 4,771—from which it might be inferred that the supply of fodder available outside the Forest Reserves was larger. The fines from impounded cattle amounted to R298-12, against R390 during the previous year.

Forest Fires.

12. The Chief Commissioner is very glad to notice that the measures taken during the year under report for the protection of Forest Reserves from fire were almost successful. Only two fires occurred during the year. The area burnt was 12½ acres. During the year 1886-87 there were 10 fires, and the area burnt was 314 acres. It is reported that 11 acres were burnt through the carelessness of a Forest Guard. Last year, also, nearly 70 acres were burnt through the carelessness of Foresters. The Assistant Conservator should see that the Foresters are more careful in their work.

13. As directed by the Government of India in the review of the last Report, orders have been issued stopping the work of removing wood from forests by donkeys during the month of June.

14. The Chief Commissioner is pleased to learn that the Assistant Conservator has given proper attention to the construction of fire-lines. Two new fire-lines, of the aggregate length of 3 miles and 68 chains, were constructed during the year. The total length of fire-lines at present existing is reported to be 6,842·88 chains. The total expenditure under this head is stated to have been R671, or 1·4 pies per acre, against R665, or 1·3 pies per acre, during the previous year. The Assistant Conservator has not reported what area was protected without the adoption of special measures, nor has he explained the discrepancy in this respect pointed out in the last review. The Assistant Conservator's attention is directed to this.

15. This year also, on account of scarcity of fodder during the hot season, extensive grazing was allowed in the Forest Reserves. The number of cattle permitted to graze during the year is reported to be 37,504, as compared with 8,772 during the previous year. The figure appears to be incorrect. This was pointed out to the Assistant Conservator, and his explanation is given in the Commissioner's review. During the year under report, 1,245 head of cattle were permitted to graze free of charge, as against 1,183 permitted during the previous year. The grazing dues amounted to R5,604-1.

Grazing.

16. The quantity of grass removed by the right-holders during the year was more than that in the previous year, the number of permits issued being 8,118, against 7,107. The value of the grass removed is estimated to be R47,385.

17. No experiments were tried during the year under report. It was reported by the Commissioner that the experiments tried in 1884 were not successful, and that there is little prospect of the villagers being induced to take the matter into their own hands, as there is no hope of the produce from the silos being sold locally or being otherwise used; but the Chief Commissioner desires that the matter should not be lost sight of.

Ensilage.

18. On account of favourable rains, the natural reproduction was most satisfactory. Three new pattern areas are reported to have been fenced. It is expected that the next Report will give a careful record of the results of further experiments. The Chief Commissioner regrets to notice that endeavours to raise date-palms did not prove successful, and would be glad to have the experiments renewed.

Natural Reproduction.

19. The results under this head during the year under report appear very favourable. Plantations of mango, bir, cher, and sissu were successful. Other plants also were tried, but they did not thrive so well.

Artificial Reproduction.

20. An area of 40 acres was cut for coppice-cutting during the year. A new nursery was started at Sendra. Notwithstanding the want of water during the hot season, all nurseries are reported to have been well kept. The Assistant Conservator seems to have given due attention to this subject. The Government of India, in their review of the last Report, had asked that a Working-Plan for the Ajmere Forests should be drawn up as soon as possible; but it appears that the necessary information is not yet forthcoming. It is hoped, however, that the Assistant Conservator will be able soon to prepare the necessary data. With reference to the Government of India's remarks regarding the time for coppicing, the Assistant Conservator reports that it has been decided not to commence operations before the 1st of October.

Coppicing.

21. The remarks of the Assistant Conservator regarding the progress of exotics are read with satisfaction. The results are very good.

Exotics.

22. The results compare with those of the year 1886-87 as shown below:—

Financial Results.

| Year. | Receipts. | Expenditure. | Deficit. |
|---|---|---|---|
| | R | R | R |
| 1886-87 . . . . . | 11,275 | 20,744 | 9,469 |
| 1887-88 . . . . . | 14,293 | 18,898 | 4,605 |
| Increase or decrease . . . . . | +3,018 | −1,846 | −4,864 |

The Revenue exceeded that of the year 1886-87 by R3,018. The increase was, like last year, chiefly under the heads of firewood and charcoal, and of grazing and fodder grass. The Expenditure was less by R1,846. The Deficit was consequently R4,605, or less by R4,864 than that of the previous year. Too much stress cannot be laid on the importance of developing forests in Ajmere and Merwara. The Forest Department in Ajmere and Merwara is worked at a loss; still it is satisfactory to notice that the Deficit is being lessened. As there appears no necessity for constructing any more fencing, it is hoped that the expenditure will be further reduced next year.

23. Mr. A. E. Lowrie, Assistant Conservator of Forests, was transferred to the Central Provinces a few days before the end of the year, and was succeeded by Mr. J. E. Barrett, who joined his appointment some time after the end of the year.

24. Mr. Barrett has remarked that the Foresters in Ajmere and Merwara are very badly paid, but, in the present state of the Forest finances, the Chief Commissioner does not think it advisable to recommend any increment to their pay.

25. On the whole, the progress made during the year may be considered fair.

ORDER.—Ordered that a copy of this Resolution, together with the original Report and statements, be forwarded to the Government of India, in the Revenue and Agricultural Department, under cover of a separate letter.

Ordered, also, that a copy of the above Resolution be forwarded to the Commissioner of Ajmere and Merwara, for information and guidance, and for favour of communication to the Assistant Conservator of Forests.

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*Review by Colonel* G. H TREVOR, M S.C., *Commissioner and ex-officio Conservator of Forests, Ajmere-Merwara, on the Report of Forest Administration in Ajmere-Merwara for 1887-88; dated 16th August 1888.*

Areas and Boundaries.

As in the preceding year, the areas of the Government Forest Reserves comprised altogether 139 square miles.

Ten new boundary pillars were erected and the old ones kept in repair, at a total cost of R9.

Reserves in Istimrari Estates, and the Village Reserves.

2. The actual area of Reserves in 80 istimrar villages in the Ajmere District is reported to be 19,648 acres, or 852 acres less than the area shown in the last Report.

The remarks made by the Assistant Commissioner of Ajmere on paragraph 8 of Mr. Barrett's Report regarding the Village Reserves are to the same effect as the explanation and instructions I gave to Mr. Barrett when he first joined his appointment, and objected to his having anything to do with these Reserves. I told him that the plan which had been approved by me, and which, I understood, was followed by Mr. Lowrie, was that the Forest Officer should endeavour to get the villagers to set aside these Reserves for a fixed period, on the distinct promise that they should be at liberty to resume them at the end of that period, if they wished to do so, and that the Forest Officer's interference with these Reserves would be limited to supplying them with Forest Guards or Watchers, to see that the conditions of conservancy agreed to by them were fulfilled. I stated that there was no intention whatever that the Forest Officer should take possession of the land. I am consequently surprised to read this paragraph 8, and, having read it, am not so surprised that no progress in extending the area of these Reserves has been made lately.

Mr. Barrett will be furnished with a copy of these remarks, and will be asked to explain more in detail his observation that, "if any success can be attributed so far to the working of this (the Makhupura) Village Reserve, it is due to the

fact that the procedure adopted was practically the same as that adopted in working the Forest Reserves; but, considering that the forest has not been placed under any regulation, the action taken in working it was illegal." The words "practically the same" in this passage would probably be disputed by Mr. Lowrie, and what I have just said will show that I am not aware of any illegal act having been committed.

3. On his transfer to the Central Provinces, Mr. Lowrie suggested that the areas reserved by Mr. Whiteway for Village Reserves should be put on the same footing as the Makhupura Bir.

This would include a very large area at Saradhua, which it was originally proposed to take up as Government forest. I approved of this suggestion, and requested Mr. Barrett to act upon it; but he says he has been unable to carry it out, as the villagers strongly object to it. An attempt will now be made to obtain the consent of the villagers, through the Civil authorities.

Fencing.

4. 19·23 chains of stone walling were repaired, and 749·18 chains of fencing were constructed, at a total cost of R1,493-1-2. The total length of fencing constructed and the cost up to 31st March 1888 were 689,773 running feet and R15,809, respectively. Some time ago I expressed my opinion that too much money had been spent on fencing, and, as the Assistant Conservator does not deem it necessary to construct any more fencing, there seems to be no necessity for preparing an estimate of the length of unfenced boundary, called for by the Government of India in paragraph 5 of their review of the Forest Report for the year 1886-87.

General Protection, and Breaches of Forest Rules.

5. The number of prosecutions (cases) for breaches of forest rules decreased from 81 to 50, and of convictions from 75 to 46. Out of 100 persons involved in the 50 cases, 90 were convicted, against 162 out of 189 persons brought to trial in 1886-87.

The Assistant Conservator compounded 188 cases, involving 381 persons. From fines and forfeitures, including amounts realized by way of compensation, a sum of R301-3 is shewn.

The number of cattle impounded in the forest tracts decreased from 4,771 to 2,924, owing to a larger supply of fodder being available outside the Reserves than in the preceding year. The fines under this head amounted to R298-12, as against R390 in 1886-87.

Fire-Protection.

6. It is very satisfactory to note that only two fires occurred during the year, damaging an area of 12½ acres. There were 10 fires in the preceding year, and they burnt down an area of 314 acres.

Two new fire-lines in the Merwara Reserves were constructed. The total length of fire-lines constructed up to 30th June 1888 was 6,842·88 chains, and the expenditure during the season amounted to R671, or 1·4 pies per acre, against R665, or 1·3 pies per acre, in the preceding year.

Grazing and Fodder Grass.

7. As in the previous year, all the Forest Reserves were opened for grazing from March to the beginning of the rains, owing to a scarcity of fodder outside the Reserves. 36,259* cattle (16,672 in Ajmere and 19,587 in Merwara) were admitted into the forest tracts, against 7,589 last year.

The grazing rates (2½ annas per cow or bullock and 5 annas per buffalo) for cattle belonging to persons other than the right-holders were one-fourth as much

* NOTE.—This figure is apparently incorrect. The Assistant Conservator explains that he has included in this number some of the cattle admitted for grazing just before the close of the year 1886-87, owing to the amount due on account of their grazing having been realized during 1887-88. The cattle which grazed in the Reserves in 1886-87 could not, I think, be shown in the Report for the next year. They should have been included in the figures of the previous Report, and the amount due on their account shewn as outstanding balance.

again as those levied from the latter (*viz.*, 2 annas and 4 annas). The grazing dues amounted to R5,604-1-0.

The number of grass-permits issued during the year were 8,118, as against 7,107 of the previous year.

Grass of an estimated value of R47,385 was removed from the forests by right-holders.

Natural and Artificial Reproduction.

8. The natural reproduction of Dhaukra was most satisfactory in Merwara, and that of Arinj, Khumpta, Kantasi, and Dhaukra in Ajmere was fairly good. The sowing of Khair, Nim, Arinj, and Babul seeds was successful, but, owing unfortunately to the heavy frosts, about 70 per cent. of the seedlings died.

The Assistant Conservator has given no information in his report on the subject of Date-Palm plantation. Mr. Lowrie, in his Report for 1886-87, stated "that, out of the 123 plants received by him, 23 were in the Pushkar and Sendra nurseries, and the remainder were to be utilized in village nursery plantations." There is no information in the Forest Office about these village plantations, but Mr. Barrett reports that, after planting out the 23 offsets as mentioned above, his predecessor sent the remaining 100 plants in a basket to the village of Jawaja in Merwara. Through the mistake of the man who carried the baskets, some 67 plants were destroyed, he having misunderstood the orders given to him, and the remaining 33 plants, which were found alive by Mr. Lowrie on his arrival at Jawaja, were transplanted to a field of one Dewa in the village. Of these, only 6 are reported to be now existing, and they, too, it is feared, will shortly disappear.

Mango, Ber, Chir, Sissu, Kachnar, and Sandal plants were planted in some of the Reserves in Ajmere, and are reported to be progressing favourably. Of the Sandal plants, more than 50 per cent. are doing well.

The total expenditure on plantations was R1,381, being R108 less than in the preceding year.

Communications and Buildings.

9. A new inspection path between the Biliawas and Amner forests, and a pucca chauki at Rajgurh, were the additions made during the year under this head. Other paths and buildings were kept in repair.

The total expenditure amounted to R462-5-0.

Meteorological Observations.

10. Out of the five tracts in Ajmere, in and outside of which the rain-gauges are kept, in only one was the rain registered less by 52 cents than that registered outside the Reserve.

The average spring-level of the wells in the Mohwa Bir, Danta, and Rajgurh Reserves, measured during 1887, shows a considerable increase over that of the previous year.

Other experiments were also made during the year, under the immediate supervision of the Assistant Conservator of Forests.

Record of Rights.

11. The printed copies of the record of rights prepared by Mr. Whiteway, and referred to in last Report, were received during the year.

Financial results.

12. The financial results compare as follows with those of the two previous years :—

| | 1885-86 | 1886-87. | 1887-88. |
|---|---|---|---|
| | R | R | R |
| Receipts | 9,697 | 11,275 | 14,293 |
| Expenditure | 16,469 | 20,744 | 18,898 |
| Deficit | 6,772 | 9,469 | 4,605 |

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The chief sources of revenue were:—

| | R |
|---|---|
| (1) Firewood and charcoal | 5,359 |
| (2) Grazing and fodder grass | 7,524 |

Under the first head the figures, when compared with those of 1886-87, show a trifling decrease of R30, but the income under the second head rose from R4,205 to R7,524.

The expenditure decreased by R1,846. As it is proposed not to construct any further fencing at present, the expenditure will, it is hoped, be further reduced.

Free grants to Right-holders and others.

13. Wood of an estimated value of R447 was granted to right-holders and others free for household and agricultural purposes.

General remarks.

14. The rainfall of the year was more favourable to forest conservancy, and the financial results are fairly satisfactory.

Mr. Lowrie, the Assistant Conservator of Forests, was transferred to the Central Provinces a few days before the close of the year, and Mr. Barrett succeeded him shortly after the end of the year.

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*Progress Report of Forest Administration in Ajmere-Merwara for the year 1887-88, by* Mr. J. E. Barrett, *Assistant Conservator of Forests.*

## Introduction.

Government of India Review of the Forest Administration Report for 1886 87, para. 4, regarding Istimrardar Villages.

The area of Reserves in Istimrardar villages in the Ajmere district was shown in last year's Report as 20,500 acres. The actual area, however, in Ajmere-Merwara aggregates 47,156 bighas, or 19,648 acres, the number of villages concerned being 80.

2. *Village Birs.*—The number and area of these Birs in the Merwara district is given below:—

| No. | Area, in acres. |
|---|---|
| 3 | 5,074 |

Regarding the Birs in the Ajmere district, enquiries about them were instituted through the Assistant Commissioner, but as the information could not be collected in time for this Report, the area and number of the Birs will be shown in next year's Report. The grass-supplies from these Birs are more or less monopolized by a few headmen in certain villages only. In these villages there is no doubt that without the influence of the headmen there would be no Birs at all, and so it is not considered advisable to interfere with existing arrangements.

Para. 6, regarding Fencing.

3. It is not found necessary to construct any more fencing. Existing fences will be kept in repair, so that the expenditure under this head will be kept down to a low figure.

4. Orders have been issued stopping the work of removing dry wood from the forests by donkey-loads during the month of June; this will prevent all risk of the forests being set on fire through the carelessness of donkey-men.

Para. 7, regarding Fire-protection.

5. Data for the preparation of the first working-plan of the Ajmere-Merwara forests will be collected gradually, and proposals will be submitted in due time. With regard to the time of cutting the existing growth, it has been decided not to commence operations before the 1st of October.

Para. 10, regarding the drawing up of Working-plans for the Ajmere district.

## CHAPTER I.

### Area and Boundaries.

6. No alteration has taken place in the area of Forest Reserves during the year 1887-88. The total area = 139 square miles.

Area of Reserves in the division.

7. The settlement work of Ajmere-Merwara having been completed, printed copies of the "Register of claims to Land or rights to Forest Produce in Ajmere-Merwara," by Mr. R. S. Whiteway, Settlement Officer, have been received in this office for information and guidance.

Record of Rights in Forest Reserves.

8. In last year's Report mention is made of one of the villages in the Ajmere district having set aside a portion of its waste land for forest purposes. This forest land belongs to the village of Makhupura, and in the case of this "Village Reserve," the Forest Officer enters upon the land and takes possession of it without the usual notification being issued by the Local Government. This seems a curious proceeding, and under the circumstance it is illegal for the watchman to arrest a person committing an offence in this "Village Reserve," and also for the Forest Officer to compound offences committed in it. If any success can be attributed to the working so far of this "Village Reserve," it is due to the fact that the procedure adopted was practically the same as that adopted in working the Forest Reserves; but, considering that this "forest" has not been placed under any Regulation, the action taken in working it was illegal.

"Village Reserves."

9. The zemindars of two other villages in the Ajmere district also came forward under peculiar circumstances during the year, and set aside a portion of their waste land for forest purposes; but unless these forests are placed under a special Regulation, any attempt made to protect them and to administer them for the benefit of the population must end in failure.

10. The following list shows the area open to grazing from 1st November to the beginning of the following rains:—

| Forests. | Area, in acres. |
|---|---|
| Amner . . . . . | 300 |
| Srinagar . . . . . | 817 |
| Total . | 1,117 |

11. The boundary pillars round each Forest Reserve have been kept in repair. Ten pillars were erected in the Makerwali-Hokran block during the year.

Boundary pillars.

12. In Merwara 1,236 running feet of *Euphorbia* fencing and 56,135 running feet (or about 10½ miles) of dry-stone walling were constructed during the year. The following table exhibits the fencing constructed during the year :—

Fencing.

| Name of Tract. | Repairs. | | New. | | |
|---|---|---|---|---|---|
| | *Euphorbia.* | Stone. | *Euphorbia* | Stone. | Trenching. |
| | | Chains. | Chains. | Chains. | Chains. |
| Dilwara Bír | ... | ... | 12 36 | ... | ... |
| Todgarh | ... | ... | ... | 20 10 | ... |
| Sheopura | ... | ... | ... | 61·47 | ... |
| Borwar-Kotra | ... | ... | ... | 58·97 | ... |
| Amner | ... | ... | ... | 187·33 | ... |
| Banjari-Mandlan | ... | ... | ... | 233·48 | ... |
| Makerwali-Hokran | ... | ... | ... | 33 90 | ... |
| Dauta | ... | 10·83 | ... | 8 10 | ... |
| Srinagar | ... | 8·40 | ... | ... | .. |
| Nag-Pahar | ... | ... | ... | ... | 16 67 |
| Taragarh | ... | ... | ... | 10·80 | ... |
| Mohwa Bír | ... | ... | ... | 6·00 | ... |
| Total | ... | 19·23 | 12·36 | 620·15 | 16 67 |

13. The total cost of fencing during the year amounted to R1,493-1-2.

14. The total length of fencing constructed up to the end of March 1888 is given in the statement below :—

| Nature of Fencing. | Length. | Cost. |
|---|---|---|
| | Ft. | R |
| Stone-walling | 414,742 | 15,809 |
| *Euphorbia* fences | 266,427 | |
| Trenching | 8,604 | |
| Total | 689,773 | 15,809 |

## CHAPTER II.

### Surveys and Annual Plans-of-Operations.

15. The boundary pillars of some of the Forest Reserves were checked with 4-inch skeleton maps, and omissions of pillars and other discrepancies were brought to the notice of the Superintendent of Forest Surveys.

Surveys.

16. With the exception of experimental mound-sowings of "Babul" and "Arinja" seed in the Chang Reserve, all works proposed were carried out during the year.

Plan of Operations.

17. Girth measurements of trees in the sample plots at the Sendra nursery were taken in June and December. The average results of three principal species are given below :—

Measurements of growing Trees.

| Species. | Number of Trees measured. | Average annual Girth increment on 1st December. |
|---|---|---|
| | | Inch. |
| Nim | 29 | 1·45 |
| Babul | 15 | 0·41 |
| Kalia Siris | 19 | 1·65 |

## CHAPTER III.

### PROTECTION AND IMPROVEMENT OF FORESTS.

#### (1) *Establishment.*

Controlling Officers.

18. Mr. A. E. Lowrie, Assistant Conservator, held charge of the division till the 19th March 1888. On the 20th he left Ajmere for the Central Provinces, having been transferred there. His successor, Mr. J. E. Barrett, Assistant Conservator, reported his arrival at Ajmere on the 8th April.

Executive and Protective Establishments.

19. Forest Ranger Nandmal was in charge of the Merwara sub-division during the year. He worked satisfactorily. All the Foresters, excepting one named Mota, worked well. Forester Mota was suspended in February last for fabricating a grazing ticket in order to save an offender from legal punishment. His case was pending at the close of the year.

20. Foresters in the Ajmere-Merwara Division are badly paid, the pay of a 1st grade Forester being only R19, while that of the lowest or 4th grade man is R10.

Office Establishment.

21. The members forming the office establishment have done good work. Babu Nihal Chund, Clerk, was transferred on promotion to the Court of Wards office during the month of December, and Babu Ausaf Ali succeeded him.

22. Munshi Rup Narain, Mohurir, was prosecuted on a charge of embezzling Government money. He was sentenced, by the Assistant Commissioner of Merwara, to one year's imprisonment and a fine of R100, but on appeal was acquitted.

#### (2) *General Protection and Breaches of Forest Rules.*

23. The following statement shows the offences—*i.e.*, number of cases tried by the Courts—of the year with those of the previous year :—

| Year. | Convictions. | Acquittals. | TOTAL. |
|---|---|---|---|
| 1886-87 | 75 | 6 | 81 |
| 1887-88 | 46 | 4 | 50 |

The cases include the following :—

| | |
|---|---|
| Injury to forest by fire | 3 |
| Unauthorized felling | 39 |
| Illicit grazing | 7 |
| Other offences | 1 |
| TOTAL | 50 |

Cases compounded.

24. One hundred and eighty-eight cases, involving 381 persons, were compounded by the Assistant Conservator. All cases were of a petty nature.

Cattle impounded.

25. During the year 2,924 head of cattle were impounded. Of these, 1,161 were sheep and goats. The number of cattle impounded in each district, as compared with that of the last year, is given below :—

| District. | 1886-87. | 1887-88 |
|---|---|---|
| Ajmere | 2,125 | 1,115 |
| Merwara | 2,646 | 1,809 |
| TOTAL | 4,771 | 2,924 |

The decrease is due to a large fodder-supply being available outside the Reserves on account of favourable rains.

Half pound fines.

26 The fines from cattle impounded and credited to "Forests" amount to R298-12, against R390 realized during the previous year.

(3) *Forest Fires.*

Forest fires.

27. During the year only two fires occurred, the area burnt being 12½ acres. Both fires occurred in the Chang Reserve. Eleven acres were set on fire owing to the carelessness of the Forest Guard in whose beat a fire-line was being burnt, and 1½ acres by the carelessness of a *jogi*, who dropped the contents of his *hooka* on to the grass.

The Guard was punished departmentally, and the *jogi*, being prosecuted, was fined R1.

Fire lines.

28. Two new fire-lines were constructed during the year. One along the Suraghata road, in the Sheopura extension block, about 68 chains in length, and the other about 3 miles long through the Kotra block.

29 The total length of fire-lines now existing is shown in the table below :—

| Forest. | Length of Fire-lines. |
|---|---|
| | Chains. |
| Nag-Pahar | 109·58 |
| Taragarh | 46·50 |
| Rajosi | 173·50 |
| Danta | 87·62 |
| Rajgarh | 69·18 |
| Chang | 528·00 |
| Borwar | 84·00 |
| Kotra | 451·00 |
| Beliawas | 561·50 |
| Ans-Pahar | 451·50 |
| Sheopura | 136·00 |
| Dewair | 1,006·50 |
| Amner | 121·50 |
| Todgarh | 2,964·50 |
| Banjari-Mandlan | 52·00 |
| TOTAL | 6,812·88 |

Expenditure on Fire-protection.

30. The expenditure on fire-protection to 30th June 1888 amounts to R671, or 1·4 pies per acre.

### (4) *Grazing and Fodder-grass.*

31. Owing to the failure of rains in 1886-87, there was little or no fodder-grass outside the Reserves; consequently all the Forest Reserves were opened to grazing from March to the beginning of the rains.

Number of Cattle admitted to Grazing.

32. The number of cattle admitted to grazing is shown in the statement given below:—

| | Number. |
|---|---|
| Ajmere | 16,672 |
| Merwara | 19,587 |
| TOTAL | 36,259 |

For right-holders grazing rates were fixed at 2 annas per cow or bullock and 4 annas per buffalo, and for outsiders the rates were fixed at 2 annas 6 pies per cow or bullock and 5 annas per buffalo.

Cattle grazing free.

33. In addition to the area open to grazing, mentioned in paragraph 10 of this Report, the following hamlets are allowed to graze cattle free:—

| Forest. | Name of Hamlets. | Number of Cattle. |
|---|---|---|
| Rajgarh | Mayapur | 140 |
| | Naharpura | 90 |
| | Kothaj | 100 |
| Todgarh | Sarupa | 150 |
| | Jaspalan | 33 |
| | Modia | 320 |
| | Alanjarian | 280 |
| Banjari-Mandlan | Barika Chaura | 70 |
| Behawas | Motala Baria | 42 |
| Sheopura | Jelhaka Baria | 20 |
| | TOTAL | 1,245 |

Grass-cutting.

34. The grass was cut freely by right-holders as usual from November to the end of March. The accompanying statement shows the number of grass tickets issued during the year as compared with that issued during the previous year:—

| Year. | Number of tickets. | | Total. |
|---|---|---|---|
| | Ajmere. | Merwara. | |
| 1886-87 | 6,062 | 1,045 | 7,107 |
| 1887-88 | 6,000 | 2,118 | 8,118 |

### (5) *Natural Reproduction.*

Seedlings.

35. Owing to the favourable rains, the "Dhaukra" (*Anogeissus pendula*) reproduction was most satisfactory in the Merwara forests protected from fire and grazing.

In the Ajmere Reserves the natural reproduction of Arinj, Kumpta, Kantasi, and Dhaukra was fairly good. In places where the soil is good the seedlings appear in great numbers.

Pattern areas.

36. Besides the five pattern areas in Dilwara Bir, Chang, Sheopura extension, Mandlan, and Todgarh, three other areas were fenced in Taragarh, Mohwa Bir, and Todgarh blocks. The results of these experiments will be carefully recorded.

### (6) *Artificial Reproduction*—(*a*) *Sowings.*

Khair.

37. Eight maunds and fifteen seers of Khair seed were sown in the Kotra Reserve adjoining last year's sowings. The seed were sown partly broadcast, and partly by being dibbled in over an area of 31 acres. About 60 per cent. of the sowings are doing well.

Nim.

"Nim" seed was dibbled in over an area of about 2 acres in the Makerwali-Hokran block. About 20 per cent. only are progressing favourably.

Arinj and Babul.

*Arinj and Babul.*—About 7 acres were sown, partly broadcast and partly dibbled, in the Makerwali-Hokran block. The seeds germinated freely, but, owing to the heavy frosts, about 70 per cent. of the seedlings suffered.

### (*b*) *Planting.*

Planting in the Makerwali block

38. One hundred and forty-seven Mangoes were planted out; all of them are doing well. Five hundred "Ber" (*Zizyphus jujuba*) were also planted. Of these, 275 are progressing favourably. Nineteen "Chir" were also planted; all are alive, and some have reached a height of 18 inches.

Planting in the Danta block.

Two hundred "Sissu" were planted in this block, of which 75 per cent. are thriving. Twenty-three "Tun" planted are all alive.

Ninety-two Chandan (Sandal) were planted, out of which 47 are doing well.

Out of one hundred and thirty-two "Kachnar" planted, 74 are alive.

Planting in the Mohwa Bir and Madar-Pahar blocks.

Three hundred and twenty Sandal plants were put out in these two blocks; 200 have survived and are doing well.

### (*c*) *Improvement cuttings.*

39. Areas of 10 acres each were cut in the Mohwa Bir and Madar Pahar blocks, and 20 acres were cut in the Nag Pahar block. These fellings were made for the purpose of improving the growth.

Nurseries.

40. A new nursery was started at Sendra. This nursery is situated considerably closer to the forests of the Chang beat than the Beawar nursery, which formerly supplied the plants. It is proposed to lease out the latter nursery for cultivation. All the other nurseries have been kept up, though the want of water during the hot months was felt severely in the one at Mohwa Bir.

### (*d*) *Exotics in Nurseries.*

41. In the Sendra nursery, Chir, Date, *Eucalyptus*, and Sandal seed were sown and have very successfully germinated.

*Eucalyptus.*

Sixty plants of *Eucalyptus viminalis* and *Eucalyptus rostrata* are now flourishing in the Pushkar nursery, and 7 in the Bir nursery.

*Grevillea robusta.*

Sixty-two plants of *Grevillea robusta* in the Pushkar nursery are ready for planting out. Some of these have reached a height of 2 feet.

*Pinus longifolia.*

Thirty-six plants are now alive in the Pushkar nursery. Some of these are 6 inches in height and will be planted out during the coming rains. Out of 400 plants in the Bir nursery, 100 are ready to be planted out.

*Terminalia Arjuna.*

Three hundred plants are thriving in the Pushkar nursery and 140 in the Mohwa Bir nursery; all these are ready to be planted out.

*Santalum album.*

One hundred and eighteen plants are ready to be put out. The greater number of these exceed one foot in height.

Sain.

One hundred "Sain" plants in the Bir nursery are progressing favourably. Some are two feet in height.

Bahera.

Eighty plants have successfully germinated and are doing well.

Fruit trees.

Twenty-five Bombay Plantains and 102 fruit trees of differents sorts were put out in the Sendra nursery. Of these, 111 are thriving.

### *Communications and Buildings.*

Roads.

42. A new road 8 miles long was constructed at a cost of R48-13, to connect the Beliawas and Amner forests. Other paths were kept in good order.

Buildings.

43. A pucca chauki was constructed during the year at Rajgarh at a cost of R70; other chaukis were kept in thorough repair.

44. The following gives the total cost under this head :—

| | R | a. | p. |
|---|---|---|---|
| (a) Roads and bridges . . . . . | 96 | 3 | 10 |
| (b) Buildings . . . . . | 118 | 11 | 6 |
| (c) Other works . . . . . | 247 | 5 | 8 |
| TOTAL . | 462 | 5 | 0 |

## CHAPTER IV.

Temperature and humidity.

45. The meteorological readings of two stations erected last year at Jaspalan were taken, also those of the Ajmere nursery and Mohwa Bir. The results of the readings are ven in Appendices A, B, and C.

Rainfall.

46. Two new stations were started at Jaspalan and Tilakhera in the Todgarh Reserve, one inside and the other outside the forest. The table given in Appendix D shows the rainfall for the year in Ajmere-Merwara.

Experiments to determine the water-level in Wells.

47. The results of these experiments are given in Appendix E.

# CHAPTER V.

## YIELD AND WORKING.

### *(I) Departmental Operations.*

48. The accompanying statement shows the quantity of firewood and charcoal removed during the year :—

| Locality. | Description. | Quantity. | |
|---|---|---|---|
| | | Mds. | C.ft |
| Chang . . . . . | Clearances . . . . . | 14,216 | 56,864 |
| Todgarh . . . . . | Do. . . . . | 1,200 | 4,800 |
| Todgarh . . . . . | Drywood . . . . . | 53 | 212 |
| Todgarh . . . . . | Charcoal . . . . . | 156 | ... |
| | TOTAL . | 15,625 | 61,876 |

Chang block fellings.

49. An area of 247 acres was marked for coppicing in the Chang block, adjoining the previous year's cuttings. Of this area, 136 acres were cut during the year, and the total quantity of produce removed amounted to 14,216 maunds.

Charcoal.

50. One hundred and thirty maunds and 30 seers of charcoal were manufactured in the Todgarh block and sold.

51. The quantity of firewood and charcoal removed during the year, as compared with that removed during the previous year, is shown below :—

| | 1886-87. | | 1887-88. | |
|---|---|---|---|---|
| | Mds. | C.ft. | Mds. | C.ft. |
| Firewood . . . . . | 30,670 | 109,536 | 15,469 | 61,876 |
| Charcoal . . . . . | 98 | ... | 156 | ... |

### *(II) Removal of Produce by Purchasers.*

52. The information under this head is given in Forms Nos. 54 and 55.

Timber.

53. Timber for household purposes was sold to villagers not having rights at the fixed rate, the revenue realized being R101-2-3.

Fuel.

54. Areas of 10 acres each in the Mohwa Bir and Nag-Pahar blocks were sold and realized a sum of R177 and R281, respectively. The drywood in all blocks of the Ajmere sub-division was sold by auction and realized R576-9-9. The removal of drywood by donkey and head loads was continued in Merwara and realized a sum of R1,204.

Bamboos.

55. 3,727 bamboos were sold for R52-12-9.

Grass and grazing.

56. The revenue realized from grass and grazing amounted to R7,524-1, against R4,205-9-1 realized during the previous year.

Minor forest produce.

57. The total revenue from this source was R318-11-3, against R498 realized during the previous year.

*(III) Free Grants.*

Timber and fuel.

58. The accompanying table shows the quantity of timber and fuel given to right-holders free of cost :—

| Description of Wood. | 1886-87. | 1887-88 | | | |
|---|---|---|---|---|---|
| | | Right-holders. | Others. | Total. | Estimated Value. |
| | | | | | R |
| Jungle poles for household purposes . | 8,243 | 8,436 | 21 | 8,457 | 298 |
| Ploughs, &c., for agricultural purposes . | 605 | 580 | ... | 580 | 104 |
| Fuel . . . . . | Mds. 307 | 258 | ... | 258 | 45 |
| TOTAL . | ... | ... | ... | ... | 447 |

Grass

59. Grass also was freely cut by right-holders within forest limits, the total number of bundles removed in Ajmere-Merwara being 758,160, of which the estimated value is R47,385.

## CHAPTER VI.

### FINANCIAL RESULTS.

60. The following statement gives the financial results of the year, as compared with those of the two previous years :—

| Budget heads. | 1885-86. | 1886-87. | 1887-88. |
|---|---|---|---|
| | R | R | R |
| Receipts . . . . . | 9,697 | 11,275 | 14,293 |
| Expenditure { A.—Conservancy and Works . . . | 4,210 | 8,281 | 5,887 |
| Expenditure { B.—Establishments . . . . . | 12,259 | 12,463 | 13,011 |
| TOTAL . . | 16,469 | 20,744 | 18,898 |
| Deficit . . | 6,772 | 9,469 | 4,605 |

61. There is a Deficit of R4,605, chiefly due to the cost of fencing. Other works were also carried out.

62 A. VIII*e*.—*Fire Protection*.—Shows an increase of R6, owing to two fire-lines being constructed during the year.

Principal heads of Receipts and Expenditure.

63. Arranged under the three main heads, the Receipts and Charges of the year compare as follows with those of the previous year :—

| Year. | I b. Timber and other produce removed by Government Agency. | | II. Other revenue | | III. Formation, protection, and improvement of forests. | Total. | |
|---|---|---|---|---|---|---|---|
| | Receipts. | Charges | Receipts. | Charges | | Receipts. | Charges. |
| | R | R | R | R | R | R | R |
| 1886-87 . . . | 3,468 | 1,683 | 7,807 | 5,096 | 13,966 | 11,275 | 20,744 |
| 1887-88 . . . | 3,120 | 1,690 | 11,173 | 5,211 | 11,997 | 14,293 | 18,898 |

Revenue.

64. The revenue exceeded that of the previous year by R3,018. This increase is chiefly due to the following two items :— I *b*.—firewood and charcoal, and II *d*.—grazing and fodder grass.

Expenditure.

65. The expenditure is less than that of the previous year by R1,846.

# Form No. 49.

*Area of Reserved Forests, 1887-88.*

| Division. | Civil District or Territory. | Name of Forest. | Area on 1st April 1887. | | Added during the year. | Excluded or transferred to other heads. | Area on 1st March 1888. | | No. and date of Notification of addition or transfer. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Acres. | Equivalent in square miles. | Acres. | Acres. | Acres. | Equivalent in square miles. | | |
| Ajmer-Merwara. | Ajmere | Mohwabir and Madar hill | 2,736 | 4 | ... | ... | 2,736 | | | |
| | | Nag-pahar | 2,479 | 4 | ... | ... | 2,479 | 4 | | |
| | | Taragarh Valleys | 1,226 | 2 | ... | ... | 1,226 | 2 | | |
| | | Srinagar and Bir | 3,623 | 6 | ... | ... | 3,623 | 6 | | |
| | | Rajosi | 1,152 | 2 | ... | ... | 1,152 | 2 | | |
| | | Danta | 1,580 | 3 | ... | ... | 1,580 | 3 | | |
| | | Rajgarh | 2,199 | 3 | ... | ... | 2,199 | 3 | | |
| | | Makerwali Hookran | 2,675 | 4 | ... | ... | 2,675 | 4 | | |
| | | Total | 17,670 | 28 | ... | ... | 17,670 | 28 | | |
| | Merwara | Chang | 2,947 | 5 | ... | ... | 2,947 | 5 | | |
| | | Hattun and Sheopura | 2,771 | 4 | ... | ... | 2,771 | 4 | | |
| | | Beliawas and Taragarh | 3,336 | 5 | ... | ... | 3,336 | 5 | | |
| | | Todgarh and Barakhan | 33,964 | 53 | ... | ... | 33,964 | 53 | | |
| | | Dilwara and Changbir | 281 | ... | ... | ... | 281 | ... | | |
| | | Borwarkotra | 4,660 | 7 | ... | ... | 4,660 | 7 | | |
| | | Aus-pahar | 1,282 | 2 | ... | ... | 1,282 | 2 | | |
| | | Dewair | 12,968 | 20 | ... | ... | 12,968 | 20 | | |
| | | Panjari-Mandlan | 4,731 | 8 | ... | ... | 4,731 | 8 | | |
| | | Amner | 4,654 | 7 | ... | ... | 4,654 | 7 | | |
| | | Total | 71,594 | 111 | ... | ... | 71,594 | 111 | | |
| | | Grand Total | 89,264 | 139 | ... | ... | 89,264 | 139 | | |

# Form No. 50.

*Prosecutions for Breaches of Forest Rules during 1887-88.*

| Forest Division and Civil District. | Cases pending from 1886-87. | NEW CASES OF THE YEAR. | | | | | DISPOSED OF DURING THE YEAR. | | | | | | | Cases pending at close of year. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Injury to forest by fire. | Unauthorized felling or appropriation of wood and minor forest produce. | Grazing without permission, or in tracts in which grazing is prohibited | Other offences | Total new cases of the year. | Total cases. | Convictions. | | Acquittals. | | Total. | | |
| | | | | | | | | Cases | Persons. | Cases. | Persons | Cases. | Persons. | |
| Madar-pahar and Mohwabir | ... | ... | 1 | ... | 1 | 2 | 2 | 2 | 2 | ... | ... | 2 | 2 | |
| Nag-pahar | ... | ... | 3 | ... | ... | 3 | 3 | 3 | 7 | ... | ... | 3 | 7 | |
| Makerwali Hokran | ... | ... | 5 | ... | ... | 5 | 5 | 5 | 5 | ... | ... | 5 | 5 | |
| Taragarh Valleys | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| Srinagar | .. | ... | 5 | ... | ... | 5 | 5 | 5 | 6 | ... | ... | 5 | 6 | |
| Danta | ... | ... | 1 | ... | ... | 1 | 1 | 1 | 2 | ... | ... | 1 | 2 | |
| Rajosi | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| Rajgarh | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| TOTAL | ... | ... | 15 | ... | 1 | 16 | 16 | 16 | 22 | ... | ... | 16 | 22 | |
| Chang | ... | 1 | 4 | .. | ... | 5 | 5 | 5 | 5 | .. | ... | 5 | 5 | |
| Sheopura | ... | ... | — | 2 | ... | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | |
| Behawas | ... | 1 | ... | 2 | ... | 3 | 3 | 2 | 2 | 1 | 1 | 3 | 3 | |
| Todgarh | ... | 1 | 7 | 2 | ... | 10 | 10 | 9 | 43 | 1 | 4 | 10 | 47 | |
| Dilwarabir | ... | ... | 1 | ... | ... | 1 | 1 | 1 | 1 | .. | — | 1 | 1 | |
| Borwarkotra | — | ... | 3 | ... | ... | 3 | 3 | 3 | 3 | ... | ... | 3 | 3 | |
| Dewair | ... | ... | 5 | ... | ... | 5 | 5 | 5 | 7 | ... | ... | 5 | 7 | |
| Amner | ... | ... | 2 | ... | ... | 2 | 2 | 1 | 1 | 1 | 3 | 2 | 4 | |
| Banjari-Mandlan | .. | ... | 2 | 1 | ... | 3 | 3 | 3 | 5 | ... | ... | 3 | 5 | |
| TOTAL | ... | 3 | 24 | 7 | ... | 34 | 34 | 30 | 68 | 4 | 10 | 34 | 78 | |
| GRAND TOTAL | ... | 3 | 39 | 7 | 1 | 50 | 50 | 46 | 90 | 4 | 10 | 50 | 100 | |

## Form No. 51.

*Area of Forest Tracts protected from Fire during the dry Season 1888 (to accompany Report for 1887-88).*

| Division. | Forest Tracts. | Year in which protection commenced. | Area actually protected up to 15th June 1887. | During dry season of 1888. | | | Cost during the season. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | | Area attempted to be protected. | Failures. | Actually protected. | | |
| Ajmere | Mohwabir and Madar hill | ... | 2,736 | 2,736 | ... | 2,736 | ... | |
| | Nag-pahar | 1880 | 2,479 | 2,479 | ... | 2,479 | 20 | |
| | Taragarh Valleys | 1874 | 1,163 | 1,226 | ... | 1,226 | 20 | |
| | Srinagar and Bir | 1880 | 3,623 | 3,623 | ... | 3,623 | ... | |
| | Rajosi | 1880 | 1,147 | 1,152 | ... | 1,152 | 25 | |
| | Danta | 1882 | 1,580 | 1,580 | ... | 1,580 | 33 | |
| | Rajgarh | 1884 | 2,199 | 2,199 | ... | 2,199 | 4 | |
| | Makerwali Hookran | 1885 | 2,675 | 2,675 | ... | 2,675 | ... | |
| | Total | ... | 17,602 | 17,670 | ... | 17,670 | 102 | |
| Merwara | Chang | 1881 | 2,947 | 2,947 | 12 | 2,935 | 33 | 2 fires. |
| | Hattun and Sheopura | 1882 | 2,771 | 2,771 | ... | 2,771 | 8 | |
| | Beliawas and Taragarh | 1874 | 3,326 | 3,336 | ... | 3,336 | 35 | |
| | Todgarh and Barakhan | 1874 | 33,728 | 33,964 | ... | 33,964 | 305 | |
| | Dilwara and Chang Bir | ... | 281 | 281 | ... | 281 | ... | |
| | Borwarkotra | 1882 | 4,660 | 4,660 | ... | 4,660 | 28 | |
| | Aus-pahar | 1877 | 1,282 | 1,282 | ... | 1,282 | 28 | |
| | Dewair | 1881 | 12,968 | 12,968 | ... | 12,968 | 83 | |
| | Banjari-Mandlan | 1884 | 4,731 | 4,731 | ... | 4,731 | 23 | |
| | Amner | 1884 | 4,654 | 4,654 | ... | 4,654 | 26 | |
| | Total | ... | 71,348 | 71,594 | 12 | 71,582 | 569 | |
| | GRAND TOTAL | ... | 88,950 | 89,264 | 12 | 89,252 | 671 | |

# Form No 52.

*Area of Plantations, 1887-88.*

| Division. | Name of Plantation. | Area in Acres: On 1st April 1887. | Area in Acres: Added during the year. | Area in Acres: Excluded during the year | Area in Acres: Area on 31st March 1888. | Receipts of the year. | Charges of the year. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | *Out of the Area taken up under the Regulation.* | | | | | | | |
| Ajmere | Mohwabir and Madar hill | 59 | 3 | ... | 62 | ... | 60 | |
| | Nag-pahar | 18 | 2 | ... | 20 | ... | 3 | |
| | Taragarh Valleys | 63 | ... | ... | 63 | ... | ... | |
| | Srinagar | 8 | 3 | ... | 11 | ... | 14 | |
| | Danta | 24 | 3 | ... | 27 | ... | 105 | |
| | Rajgarh | 1 | 1 | ... | 2 | ... | 6 | |
| | Maherwali Hookran | 22 | 6 | ... | 28 | ... | 73 | |
| | Total | 195 | 18 | ... | 213 | ... | 261 | |
| Merwara | Chang | 20 | ... | ... | 20 | ... | ... | |
| | Sheopura and Hattun | 30 | ... | ... | 30 | ... | ... | |
| | Beliawas | 12 | ... | ... | 12 | ... | ... | |
| | Todgarh | 46 | 1 | ... | 47 | ... | 1 | |
| | Borwarkotra | 19 | ... | ... | 19 | ... | ... | |
| | Dilwara and Changbir | 71 | ... | ... | 71 | ... | ... | |
| | Banjari-Mandlan | 3 | ... | ... | 3 | ... | ... | |
| | Dewair | ... | ... | ... | ... | ... | 3 | |
| | Total | 201 | 1 | ... | 202 | ... | 4 | |
| | *Area not taken up under the Regulation.* | | | | | | | |
| Ajmere | Shikast masjid | 6 | ... | ... | 6 | ... | 56 | |
| Merwara | Parade Plantation | 8 | ... | ... | 8 | ... | .. | |
| | Total | 14 | ... | ... | 14 | ... | 56 | |
| | *Nurseries* | | | | | | | |
| Ajmere | Ajmere nursery | 10 | ... | ... | 10 | ... | 160 | |
| | Pushkar nursery | 4 | ... | ... | 4 | ... | 320 | |
| | Bir nursery | 4 | ... | ... | 4 | ... | 157 | |
| Merwara | Beawar nursery | 4 | ... | ... | 4 | ... | 221 | |
| | Sendra nursery | ... | ... | ... | ... | ... | 107 | |
| | General | ... | ... | ... | ... | ... | 95 | |
| | Total | 22 | ... | ... | 22 | ... | 1,060 | |
| | GRAND TOTAL | 432 | 19 | ... | 451 | ... | 1,381 | |

## Form No. 54.

*Outturn of Timber and Firewood during the year 1887-88.*

| Division. | Description of materials. | Outturn, in cubic feet. | | | | | | | | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Selection fellings. | Clearances. | Thinnings. | Total. | Removed by | | | | |
| | | | | | | Government agency. | Purchasers. | Free grants. | Right-holders. | |
| Ajmere-Merwara | Firewood | ... | 64,996 | ... | 64,996 | 64,996 | ... | ... | ... | The measurements given are approximate, and refer to the Merwara Sub-Division only. All wood was sold in Ajmere by auction and cut and removed by purchasers. Free grants were made of standing wood, for which no measurement can be given. |
| | Dry-wood | ... | ... | ... | 96,236 | ... | 96,236 | ... | ... | |

## Form No. 55.

*Outturn of Minor Forest Produce during the year 1887-88.*

| Division. | Description of Produce. | Produce removed or utilized. | | | | | | | | | | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | By Government Agency. | | By Purchasers. | | By Free grants. | | By Right-holders. | | Total. | | |
| | | Quantity. | Value. | Quantity. | Value. | Quantity. | Value. | Quantity. | Value. | Quantity. | Value. | |
| | | | | | R | | | | R | | R | |
| Ajmere-Merwara | Grass | ... | ... | By auction | 1,920 | ... | ... | 758,160 | 47,385 | ... | 49,305 | |
| | Fruits | ... | ... | Ditto | 184 | ... | ... | ... | ... | ... | 319 | |
| | Honey and wax | ... | ... | Ditto | 56 | | | | | | | |
| | Miscellaneous | ... | ... | Ditto | 79 | | | | | | | |
| | Total | ... | ... | ... | 2,239 | ... | ... | 758,160 | 47,385 | ... | 49,624 | |

## Form No. 56.

*Account of Timber and other Produce cut or collected by Government agency and brought to Sale Depôts or sold locally during the Year 1887-88.*

| Particulars. | No. or quantity. | Cubic feet. | Total of each head. No. or quantity. | Total of each head. Cubic feet. | Particulars. | No. or quantity. | Cubic feet. | Total of each head. No. or quantity. | Total of each head. Cubic feet. |
|---|---|---|---|---|---|---|---|---|---|
| | Mds. Srs. | | Mds. Srs. | | | Mds. Srs | | Mds. Srs. | |
| *Balance in hand—* | | | | | *Sold locally—* | | | | |
| Charcoal . . . . | 26—0 | ... | 26—0 | | Charcoal . . . . | 156—28 | | | |
| | | | | | Green-wood . . . | 14,216—0 | | | |
| *Received during the year—* | | | | | Dry-wood . . . . | 53—5 | | 14,425—33 | |
| Charcoal . . . . | 130—28 | | | | Green-wood . . . | 200 camel loads. | ... | 200 camel loads. | |
| Green-wood . . . . | 14,216—0 | | | | | | | | |
| Dry-wood . . . . | 53—5 | | 14,399—33 | | | | | | |
| Green-wood . . . . | 200 camel loads. | ... | 200 camel loads. | | | | | | |
| | | | Mds. Srs. | | | | | | |
| Total | ... | ... | 14,425—33 and 200 camel loads. | | Total . | ... | ... | 14,425—33 and 200 camel loads. | |

## Form No. 58.

*Summary of Revenue and Expenditure during 1887-88.*

### REVENUE.

| | R | a. | p. |
|---|---|---|---|
| I.—Timber and other produce removed from the forests by Government agency :— | | | |
| a. Timber | ..... | | |
| b. Firewood and Charcoal | 3,119 | 12 | 1 |
| c. Bamboos | ..... | | |
| d. Sandal-wood | ..... | | |
| e. Grass and other minor produce | ..... | | |
| II.—Timber and other produce removed from the forests by consumers or purchasers :— | | | |
| a. Timber | 101 | 2 | 3 |
| b. Firewood and Charcoal | 2,239 | 1 | 0 |
| c. Bamboos | 52 | 12 | 9 |
| d. Grazing and Fodder Grass | 7,524 | 1 | 0 |
| e. Other minor produce | 318 | 11 | 3 |
| III.—Confiscated drift and waif wood | ..... | | |
| IV.—Revenue from forests not managed by Government— | | | |
| a. Duty on Foreign Timber and other Forest Produce | ..... | | |
| b. Revenue from Shared and Private Forests | ..... | | |
| V.—Miscellaneous :— | | | |
| a. Fines and Forfeitures | * 599 | 15 | 0 |
| b. Refunds | ..... | | |
| c. Other sources | 337 | 8 | 1 |
| Total Revenue | 14,292 | 15 | 5 |

### EXPENDITURE.

#### A.—Conservancy and Works.

| | | | |
|---|---|---|---|
| I.—Timber and other produce removed from the Forests by Government Agency— | | | |
| a. Timber | ..... | | |
| b. Firewood and charcoal | 1,640 | 4 | 8 |
| c. Bamboos | .....* | | |
| d. Sandal-wood | ..... | | |
| e. Grass and other minor produce | 49 | 10 | 3 |
| II.—Timber and other produce removed from the Forests by Consumers or Purchasers | 7 | 4 | 0 |
| III.—Drift and waif wood and confiscated Forest Produce | ..... | | |
| IV.—Revenue from Forests not managed by Government— | | | |
| a. Duty on foreign timber and other forest produce | ..... | | |
| b. Revenue from shared and private forests | ..... | | |
| V.—Rent of leased Forests and payments to Shareholders in Forests managed by Government | ..... | | |
| Carried over | 1,697 | 2 | 11 |

* Corrected as per Comptroller General's letter No. 606, dated 12th June 1888.

| | R | a. | p. |
|---|---|---|---|
| Brought forward | 1,697 | 2 | 11 |
| **VI.—Live Stock, Stores, Tools and Plant—** | | | |
| a. Purchase of cattle | ..... | | |
| b. Feed and keep of cattle | 46 | 3 | 2 |
| c. Purchase of stores, tools and plant | 21 | 7 | 0 |
| **VII.—Communications and Buildings—** | | | |
| a. Roads and bridges | 96 | 3 | 10 |
| b. Buildings | 118 | 11 | 6 |
| c. Other works | 247 | 5 | 8 |
| **VIII.—Demarcation, improvement and extension of Forests—** | | | |
| a. Demarcation | 9 | 8 | 0 |
| b. Compensation for land and rights | ..... | | |
| c. Surveys and working-plans | 6 | 11 | 6 |
| d. Sowing and planting | 1,381 | 4 | 2 |
| e. Protection from fire | 745 | 5 | 4 |
| f. Other works | 1,503 | 1 | 2 |
| **IX.—Miscellaneous—** | | | |
| a. Refunds | 6 | 4 | 0 |
| b. Law charges | ..... | | |
| c. Other charges | 7 | 14 | 6 |
| Total A.—Conservancy and Works | 5,887 | 2 | 0 |

## B.—Establishments.

| | | | |
|---|---|---|---|
| **I.—Salaries :—** | | | |
| a. Conservators | ..... | | |
| b. Superior Officers | 5,146 | 7 | 3 |
| c. Subordinate Forest and Depôt Establishments | 4,393 | 8 | 8 |
| d. Office Establishments | 1,403 | 11 | 2 |
| e. Deputation and Special Allowances | ..... | | |
| **II.—Travelling Allowances :—** | | | |
| a. Conservators | ..... | | |
| b. Superior Officers | 1,069 | 5 | 8 |
| c. Subordinate Forest and Depôt Establishments | 221 | 10 | 0 |
| d. Office Establishments | 34 | 11 | 3 |
| **III.—Contingencies :—** | | | |
| a. Stationery | 31 | 9 | 0 |
| b. Carriage of Tents and Records | 210 | 11 | 11 |
| c. Rents, Rates, and Taxes | 182 | 10 | 0 |
| d. Pay of Police Guards | ..... | | |
| e. Official Postage | 78 | 14 | 0 |
| f. Sundries | 237 | 3 | 1 |
| Total B.—Establishments | 13,010 | 6 | 0 |
| Grand Total of Expenditure | 18,897 | 8 | 9 |

JAS. TAYLOR,

*Asst. Comptroller General (Forests).*

**Form No. 59**

*Account Current for the year 1887-88.*

| Dr. | R | a. | p. | Cr. | R | a. | p. |
|---|---|---|---|---|---|---|---|
| To Cash Balance | 41 | 15 | 8 | By Expenditure as per Annual Summary, Form No. 58 | 15,597 | 8 | 9 |
| „ VIII—Assessed Taxes— | | | | „ Deposits | 363 | 2 | 1 |
| Income Tax—Deductions from salaries | 162 | 7 | 0 | „ Forest Cash Remittances—Local— | | | |
| „ Revenue as per Annual Summary, Form No. 58 | 14,292 | 15 | 5 | Remittances to Treasuries | 14,289 | 13 | 4 |
| „ Deposits | 210 | 0 | 0 | Inter-Divisional Transfers | ..... | | |
| „ Forest Cash Remittances—Local— | | | | „ Advances Recoverable | 1,942 | 14 | 4 |
| Forest cheques drawn | 19,406 | 8 | 3 | „ Cash Balance | 11 | 4 | 1 |
| Inter-Divisional Transfers | ..... | | | | | | |
| „ Advances recoverable | 1,367 | 12 | 4 | | | | |
| „ Account Current (other Governments)— | | | | | | | |
| Remittances from Government, North-Western Provinces and Oudh | 9 | 15 | 11 | | | | |
| „ Inter-Departmental Transfers— | | | | | | | |
| Survey of India Department | 13 | 0 | 0 | | | | |
| Total | 35,504 | 10 | 7 | Total | 35,504 | 10 | 7 |

JAS. TAYLOR,

*Assistant Comptroller General (Forests).*

## Form No. 61.

*Outstandings and Liabilities on account of Contractors and Disbursers for 1887-88.*

| Division. | Department Debtor. | | | Department Creditor. | | | Balance Due. | | Remarks. |
|---|---|---|---|---|---|---|---|---|---|
| | At commencement of year. | Recoveries in cash and value of supplies and work done during the year. | At close of year. | At commencement of year. | Payments made during year. | At close of year. | To Department (Outstandings). | By Departments (Liabilities). | |
| | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | |
| Ajmere-Marwara . . | 95 15 11 | 1,367 12 4 | 1,463 12 3 | 23 5 7 | 1,942 14 4 | 1,966 3 11 | 596 11 11 | 94 4 3 | |
| Total . | 95 15 11 | 1,367 12 4 | 1,463 12 4 | 23 5 7 | 1,942 14 4 | 1,966 3 11 | 596 11 11 | 94 4 3 | |

Jas. Taylor,
*Assistant Comptroller General (Forests).*

## Form No. 62.

*Financial Results of the year 1887-88.*

| Division. | Timber and other produce removed from the forests by Government Agency. | | Other Revenue. | | Formation, Protection and Improvement of Forests. | Total. | | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | Receipts. | Charges. | Receipts. | Charges. | Charges. | Receipts. | Charges. | |
| | R | R | R | R | R | R | R | |
| Ajmere-Merawara . . | 3,120 | 1,690 | 11,173 | 5,211 | 11,997 | 14,293 | 18,898 | |
| Total . | 3,120 | 1,690 | 11,173 | 5,211 | 11,997 | 14,293 | 18,898 | |



BENGAL SECRETARIAT LIBRARY

# APPENDIX A.

*Statement showing Rainfall registered during the year 1887.*

| Calendar Year. | Mohwabir No. 1. | | Mohwabir No. 2. | | Madar Hill. | Nag-Pahar. | | Rajgarh. | | Danta. | | Dilwarabir. | | Rajnagarh. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | In. | Out. | In. | Out. | Intermediate. | In. | Out. | In. | Out. | In. | Out. | In. | Out. | Intermediate. |
| | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. |
| January 1887 | ·74 | ·67 | ·92 | 1·3 | ·91 | ·84 | ·63 | ·38 | ·28 | ·23 | ·26 | ·38 | ·33 | ·69 |
| February " | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| March " | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| April " | ... | ... | ·1 | ... | ... | ... | ... | ·8 | ·10 | ... | ... | ... | ·1 | ... |
| May " | ·18 | ·13 | ·13 | ·8 | ... | ... | ... | ... | ... | ... | ... | ·1 | ·1 | ·9 |
| June " | 2·66 | 2·19 | 2·24 | 2·33 | 1·56 | 1·51 | 1·16 | ·58 | 1·79 | 1·8 | 1·50 | 1·77 | 1·62 | 1·99 |
| July " | 13·72 | 13·61 | 13·94 | 11·37 | 10·3 | 12·19 | 7·35 | 7·52 | 6·13 | 11·56 | 11·33 | 13·89 | 11·72 | 9·17 |
| August " | 7·36 | 6·67 | 8·36 | 8·6 | 7·98 | 10·5 | 6·88 | 7·12 | 7·2 | 8·57 | 8·93 | 6·50 | 5·78 | 6·88 |
| September " | 1·4 | ·92 | 1·12 | ·99 | ·82 | 1·27 | ·66 | ... | ... | ·17 | ·12 | ·94 | ·93 | ·77 |
| October " | ·3 | ·3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| November " | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| December " | ... | ... | ... | ... | ... | ... | ... | ·4 | ·2 | ·5 | ·4 | ·2 | ·1 | ... |
| Total | 25·73 | 24·22 | 26·72 | 23·86 | 21·30 | 25·86 | 16·68 | 15·72 | 15·34 | 21·66 | 22·18 | 23·51 | 20·41 | 19·59 |
| Total for 1886 | 17·24 | 15·34 | 15·87 | 9·81 | 12·35 | 23·68 | 19·42 | 14·71 | 13·75 | 20·01 | 16·41 | 11·51 | 9·95 | 13·54 |

# APPENDIX B.

## METEOROLOGICAL OBSERVATIONS (STATION A).

*Results of Meteorological Observations conducted at the Ajmere Forest Nursery, 1,640 feet above sea-level. Observatories of the standard pattern. Cages with instrument 4 feet above ground.*

| Calendar year 1887. | Dry Minimum. | | Dry Maximum. | | Daily Means. | | Mean Vapour tension. | | | | | | Mean relative humidity. | | | | | | Rainfall in Inches. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Under Trees. | | | Outside Trees. | | | Under Trees. | | | Outside Trees. | | | |
| | Under Trees. | Outside Trees. | Under Trees. | Outside Trees. | Under Trees. | Outside Trees. | From Minima. | At 10h. | At 16h. | From Minima. | At 10h. | At 16h. | From Minima. | At 10h. | At 16h. | From Minima. | At 10h. | At 16h. | |
| | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. |
| January 1887 | 44·6 | 44·1 | 70·1 | 71·1 | 56·4 | 56·6 | ·242 | ·246 | ·239 | ·229 | ·256 | ·242 | 81 | 47 | 34 | 78 | 4 | 34 | 0·31 |
| February " | 44·5 | 49·5 | 78·2 | 78·3 | 62·0 | 64·0 | ·171 | ·144 | ·132 | ·205 | ·227 | ·235 | 56 | 19 | 13 | 55 | 31 | 23 | ... |
| March " | 57·9 | 57·1 | 89·1 | 90·7 | 73·8 | 74·3 | ·203 | ·232 | ·191 | ·187 | ·280 | ·229 | 40 | 23 | 15 | 39 | 27 | 17 | ... |
| April " | 67·0 | 66·1 | 99·5 | 101·9 | 84·3 | 85·0 | ·268 | ·279 | ·215 | ·224 | ·325 | ·269 | 40 | 20 | 12 | 35 | 22 | 15 | ·01 |
| May " | 81·2 | 80·8 | 105·3 | 107·5 | 92·1 | 93·0 | ·443 | ·518 | ·366 | ·377 | ·547 | ·392 | 41 | 34 | 17 | 35 | 33 | 17 | |
| June " | 79·2 | 79·2 | 99·2 | 101·5 | 87·2 | 88·0 | ·650 | ·697 | ·599 | ·659 | ·724 | ·620 | 66 | 52 | 37 | 69 | 52 | 36 | 1·95 |
| July " | 74·8 | 75·1 | 85·0 | 86·3 | 78·5 | 79·1 | ·771 | ·784 | ·790 | ·769 | ·816 | ·818 | 89 | 79 | 71 | 89 | 80 | 73 | 10 38 |
| August " | 73·0 | 73·4 | 83·2 | 84·8 | 77·0 | 77·6 | ·758 | ·805 | ·828 | ·770 | ·817 | ·833 | 93 | 84 | 77 | 94 | 83 | 76 | 8·0 |
| September " | 70·2 | 69·9 | 87·6 | 89·9 | 77·7 | 78·3 | ·633 | ·709 | ·679 | ·630 | ·704 | ·680 | 85 | 67 | 55 | 86 | 64 | 53 | ·62 |
| October " | 56·5 | 55·8 | 90·3 | 93·6 | 72·7 | 73·1 | ·386 | ·366 | ·306 | ·374 | ·376 | ·322 | 81 | 32 | 23 | 81 | 31 | 23 | 0·5 |
| November " | 45·7 | 45·2 | 82·8 | 85·7 | 63·5 | 63·7 | ·235 | ·199 | ·193 | ·228 | ·219 | ·222 | 74 | 23 | 19 | 74 | 24 | 21 | ... |
| December " | 42·6 | 41·9 | 76·3 | 79·2 | 58·7 | 58·8 | ·218 | ·236 | ·233 | ·213 | ·241 | ·254 | 79 | 36 | 28 | 79 | 35 | 30 | ... |
| Total for 1887 | 737·2 | 738·1 | 1047·1 | 1070·5 | 883·9 | 891·5 | 4·973 | 5·215 | 4·776 | 4·865 | 5·732 | 5·116 | 825 | 516 | 401 | 814 | 529 | 418 | 21·89 |
| Average | 61·4 | 61·5 | 87·3 | 89·2 | 73·6 | 74·3 | ·415 | ·435 | ·398 | ·405 | ·477 | ·426 | 69 | 43 | 33 | 68 | 44 | 35 | ... |
| Total for 1886 | 752·1 | 745·5 | 1049·6 | 1066·7 | 889·6 | 892·7 | 5·385 | 5·900 | 5·593 | 5·305 | 5·856 | 5·496 | 851 | 571 | 446 | 857 | 548 | 430 | 14 33 |
| Average | 62·7 | 62·1 | 87·5 | 88·9 | 74·1 | 74·4 | ·449 | ·492 | ·466 | ·442 | ·488 | ·458 | 71 | 48 | 37 | 71 | 46 | 36 | ... |

# APPENDIX C.

## METEOROLOGICAL OBSERVATIONS (STATION B).

*Result of Meteorological Observations conducted at the Mohwabir Forest Reserve (Ajmere) about 1,680 feet above sea-level. Observatories of the Dehra-Dun School Pattern. Cages with instrument 4 feet above ground.*

| Calendar year 1887. | Dry Minimum. | | Dry Maximum | | Daily Means. | | Mean Vapour Tension. | | | | | | Mean Relative Humidity. | | | | | | Rainfall. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Inside Forest. | | | Outside Forest. | | | Inside Forest. | | | Outside Forest. | | | | |
| | Inside Forest. | Outside Forest. | Inside Forest. | Outside Forest. | Inside Forest. | Outside Forest. | From Minima. | At 10h. | At 16h. | From Minima. | At 10h. | At 16h. | From Minima. | At 10h. | At 16h. | From Minima. | At 10h. | At 16h. | In Forest. | Outside Forest. |
| | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. |
| January 1887 | 41·6 | 47·1 | 71·2 | 70·4 | 55·1 | 57·4 | ·230 | ·251 | ·244 | ·249 | ·261 | ·264 | 86 | 48 | 34 | 73 | 50 | 37 | ·92 | 0·93 |
| February " | 40·7 | 49·5 | 79·7 | 78·3 | 60·6 | 64·0 | ·164 | ·179 | ·177 | ·205 | ·227 | ·235 | 62 | 24 | 17 | 55 | 31 | 23 | ... | ... |
| March " | 56·4 | 62·9 | 90·8 | 89·0 | 73·2 | 76·0 | ·184 | ·275 | ·255 | ·244 | ·349 | ·337 | 39 | 27 | 19 | 42 | 34 | 25 | ... | ... |
| April " | 64·8 | 71·5 | 101·0 | 98·6 | 83·6 | 86·1 | ·258 | ·393 | ·363 | ·327 | ·449 | ·414 | 41 | 27 | 20 | 42 | 31 | 23 | ·01 | ... |
| May " | 80·8 | 81·8 | 106·2 | 104·5 | 91·8 | 92·4 | ·444 | ·586 | ·448 | ·492 | ·649 | ·493 | 41 | 38 | 21 | 45 | 42 | 23 | ·03 | ·08 |
| June " | 78·8 | 79·5 | 100·2 | 98·1 | 87·1 | 87·2 | ·648 | ·707 | ·603 | ·651 | ·737 | ·651 | 67 | 51 | 36 | 65 | 55 | 39 | 2·24 | 2·33 |
| July " | 74·6 | 75·2 | 85·9 | 85·2 | 77·7 | 78·6 | ·762 | ·796 | ·807 | ·770 | ·804 | ·811 | 89 | 82 | 74 | 88 | 81 | 75 | 13·94 | 11·37 |
| August " | 72·8 | 73·6 | 84·5 | 83·4 | 76·3 | 77·3 | ·745 | ·805 | ·824 | ·743 | ·810 | ·822 | 91 | 87 | 76 | 89 | 84 | 77 | 8·36 | 8·06 |
| September " | 69·6 | 72·1 | 89·9 | 89·1 | 76·8 | 78·7 | ·611 | ·702 | ·674 | ·634 | ·745 | ·735 | 84 | 69 | 53 | 81 | 70 | 58 | 1·12 | 0·99 |
| October " | 54·2 | 61·3 | 92·5 | 91·2 | 71·0 | 75·0 | ·374 | ·461 | ·403 | ·429 | ·524 | ·465 | 86 | 42 | 30 | 77 | 45 | 34 | ... | ... |
| November " | 42·2 | 51·5 | 84·7 | 83·3 | 61·2 | 66·1 | ·229 | ·299 | ·283 | ·278 | ·305 | ·280 | 83 | 34 | 27 | 72 | 35 | 37 | ... | ... |
| December " | 39·3 | 47·9 | 73·9 | 77·9 | 61·7 | 60·5 | ·209 | ·234 | ·245 | ·242 | ·265 | ·236 | 86 | 35 | 29 | 72 | 40 | 28 | ... | ... |
| Total for 1887 | 715·8 | 773·9 | 1035·5 | 1049·0 | 876·1 | 899·3 | 4·858 | 5·678 | 5·326 | 5·255 | 6·125 | 5·743 | 855 | 564 | 436 | 801 | 598 | 479 | 26·72 | 23·16 |
| Average | 59·6 | 64·5 | 88·8 | 87·4 | 73·0 | 74·9 | ·405 | ·473 | ·444 | ·438 | ·510 | ·478 | 71 | 47 | 36 | 67 | 50 | 40 | ... | ... |
| Total for 1886 | 371·6 | 393·7 | 527·2 | 526·3 | 437·1 | 447·9 | 2·938 | 3·254 | 3·030 | 3·137 | 3·419 | 3·190 | 473 | 312 | 252 | 452 | 332 | 262 | 9·49 | 11·42 |
| Average | 61·9 | 65·6 | 87·9 | 87·7 | 72·8 | 74·7 | ·490 | ·542 | ·505 | ·523 | ·570 | ·532 | 79 | 52 | 42 | 75 | 55 | 44 | ... | ... |

# APPENDIX D.

## METEOROLOGICAL OBSERVATIONS (STATION C).

*Results of meteorological observations conducted at Rawli Forest Reserve (Todgarh Block) about 2,800 feet above Sea-level. Observatories of the Dehra-Dun Forest School Pattern. Cages with instrument 4 feet above ground.*

| Calendar year 1887. | Dry Minimum. | | Dry Maximum. | | Daily Means. | | Mean Vapour tension. | | | | | | Mean relative Humidity. | | | | | | Rainfall. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | In Forest. | | | Outside Forest. | | | In Forest. | | | Outside Forest. | | | | |
| | Inside Forest. | Outside Forest. | Inside Forest. | Outside Forest. | Inside Forest. | Outside Forest. | From Minima. | At 10h. | At 16h. | From Minima. | At 10h. | At 16h. | From Minima. | At 10h. | At 16h. | From Minima. | At 10h. | At 16h. | In Forest. | Outside Forest. |
| | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. |
| June 1887 . . | 77·5 | 78·0 | 98·1 | 96·9 | 85·4 | 84·9 | ·697 | ·692 | ·644 | ·695 | ·719 | ·666 | 74 | 55 | 40 | 72 | 58 | 43 | 0·7 | 0·63 |
| July " . . | 74·0 | 74·3 | 85·2 | 84·7 | 77·9 | 78·0 | ·756 | ·787 | ·779 | ·759 | ·784 | ·776 | 90 | 81 | 71 | 89 | 82 | 71 | 13·49 | 13·51 |
| August " . . | 72·0 | 72·6 | 82·5 | 82·3 | 75·5 | 75·8 | ·739 | ·794 | ·816 | ·736 | ·788 | ·816 | 94 | 88 | 80 | 91 | 87 | 80 | 7·61 | 6·94 |
| September " . . | 69·7 | 71·2 | 89·3 | 88·6 | 77·3 | 77·8 | ·621 | ·707 | ·688 | ·627 | ·679 | ·653 | 84 | 69 | 54 | 81 | 67 | 52 | 0·03 | 0·04 |
| October " . . | 59·6 | 62·0 | 94·4 | 92·3 | 74·8 | 75·8 | ·335 | ·407 | ·358 | ·435 | ·391 | ·317 | 73 | 35 | 24 | 77 | 34 | 22 | ... | ... |
| November " . . | 51·6 | 54·3 | 77·8 | 84·0 | 66·9 | 68·5 | ·268 | ·270 | ·279 | ·267 | ·278 | ·251 | 69 | 31 | 25 | 64 | 31 | 22 | 0·03 | 0·02 |
| December " . . | 46·1 | 48·9 | 81·1 | 80·5 | 61·3 | 62·6 | ·242 | ·263 | ·277 | ·250 | ·284 | ·279 | 77 | 36 | 29 | 72 | 39 | 29 | ... | ... |
| Total . | 450·5 | 461·3 | 608·4 | 609·3 | 519·1 | 523·4 | 3·708 | 3·920 | 3·841 | 3·769 | 3·923 | 3·758 | 561 | 395 | 323 | 546 | 398 | 319 | 21·86 | 21·19 |
| Average . | 64·3 | 65·9 | 86·9 | 87·0 | 74·2 | 74·8 | ·309 | ·327 | ·320 | ·314 | ·327 | ·313 | 47 | 33 | 27 | 45 | 33 | 27 | ... | ... |

Note.—This observatory was opened from the 10th June 18 7.

# APPENDIX E.

## WELL EXPERIMENT, MOHWABIR RESERVE.

*Area and description of catchment above wells. The area is about 200 acres with a catchment consisting of a fairly broad valley with numerous small streams coming into the main nala. The rock is close to the surface and abounds in quartz, so that the soil is very poor. This tract was taken up in 1872.*

| Dates. | Well No. 1. | Well No. 2. | Well No. 3. |
|---|---|---|---|
| 8th March 1887 . . . . . | 58·29 | 38·67 | 33·54 |
| 15th " " . . . . . | 57·58 | 38·88 | 38·63 |
| 22nd " " . . . . . | 59·54 | 38·92 | 33 75 |
| 29th " " . . . . . | 63·0 | 39·04 | 33·83 |
| 5th April " . . . . . | 70·63 | 39·13 | 33·88 |
| 12th " " . . . . . | Well being deepened. | 39·17 | 34·08 |
| 19th " " . . . . . | | 39·42 | 34·21 |
| 26th " " . . . . . | | 39·58 | 34·38 |
| 3rd May " . . . . . | | 39·78 | 34·40 |
| 10th " " . . . . . | | 40·13 | 34·54 |
| 17th " " . . . . . | | 40·04 | 34·83 |
| 24th " " . . . . . | | 40·38 | 34·67 |
| 31st " " . . . . . | | 40·13 | 35·00 |
| 7th June " . . . . . | | 40·54 | 35·38 |
| 14th " " . . . . . | | 40·56 | 35·13 |
| 21st " " . . . . . | 67·71 | 40·54 | 35·38 |
| 28th " " . . . . . | 67·63 | 40·46 | 35·54 |
| 5th July " . . . . . | 60·96 | 40·54 | 35·04 |
| AVERAGE FOR 1887 . | 63 16 | 39·77 | 31·51 |
| AVERAGE FOR 1886 . | 42·54 | 33·76 | 26·66 |

## APPENDIX F.

### Well Experiment—Danta Reserve.

Danta.—*The catchment area below wells is about 700 acres. The valley is broad and gently undulating. The valley has a fair depth of soil, the hills and undulating ground have the rock quartzite close to the surface with little soil. The tract was reserved in 1880.* Bir.—*These wells are in fairly level ground with cultivation on three sides.*

| Dates. | Danta. | | | | Bir. | | Popsing nala. Well No. 3. |
|---|---|---|---|---|---|---|---|
| | Well No. 1. | Well No. 2 | Well No. 3. | Well No. 4. | Well No. 1. | Well No. 2. | |
| 8th March 1887 | 29 00 | 22·38 | 18·54 | 14 58 | .. | 36·17 | 13 04 |
| 15th " " | 29 46 | 22 63 | 19 79 | 14·83 | 16 50 | 27·21 | 13 46 |
| 22nd " " | 29 83 | 22 75 | 20 00 | 14 17 | 21 33 | 27·08 | 13·67 |
| 29th " " | 30 21 | 22·92 | 20 29 | 14 21 | 13 17 | 32·13 | 13 79 |
| 5th April " | 30 38 | 23 13 | 20 54 | 14 50 | 13 21 | 27 29 | 14·50 |
| 12th " " | 30 58 | 23 25 | 20 75 | 14 92 | 13 75 | 34 92 | 14 59 |
| 19th " " | 30 83 | 23 38 | 21 33 | 15 46 | 12 92 | 27 54 | 14 79 |
| 26th " " | 31·25 | 23 54 | 21 92 | 15 67 | 12 92 | 27·88 | 14 88 |
| 3rd May " | 31·63 | 23·71 | 21·75 | 15 96 | 13 08 | 28·17 | 15 25 |
| 10th " " | 32·17 | 23 88 | 22·50 | 16 46 | 13 21 | 28 25 | 15 54 |
| 17th " " | 32 29 | 24·00 | 22 46 | 16·58 | 13 33 | 28·38 | 15 79 |
| 24th " " | 32·33 | 24 08 | 23 25 | 17·04 | 13 50 | 28 96 | 16 00 |
| 31st " " | 32 63 | 24 25 | 22·42 | 17 50 | 13 50 | 28 79 | 16 33 |
| 7th June " | 33·17 | 24·42 | 23·25 | 17 67 | 13 67 | 28 83 | 16·88 |
| 14th " " | 33 42 | 24·50 | 23 04 | 17 83 | 13 75 | 28·93 | 19 79 |
| 21st " " | 33 71 | 24 67 | 23 00 | 17 79 | 13 88 | 28·67 | 17·00 |
| 28th " " | 33 88 | 24 75 | 23 63 | 17 96 | 14 00 | 28·67 | 16 88 |
| 5th July " | 34·21 | 24 93 | 23 67 | 18 17 | 14 11 | 28·50 | 16 50 |
| Average | 31 72 | 23 05 | 21·78 | 16·19 | 14 11 | 30·96 | 15·49 |
| Average for 1886 | 24 82 | 18 82 | 16 73 | 12 23 | 14·11 | 18·24 | 12 74 |

## APPENDIX G.

### Well Experiment—Rajgarh Reserve.

*The catchment area is about 1,500 acres. The ravines come down somewhat abruptly from the main ridge and forming a somewhat narrow outlet for the water through the hills. The rock is chiefly quartzite with sand hills at the foot of main ridge.*

| Dates. | Chabia, Well No. 1. | Chabia, Well No. 2. |
|---|---|---|
| 4th March 1887 | 13·46 | 11 88 |
| 11th " " | 13·92 | 10·42 |
| 18th " " | 14 29 | 11·13 |
| 25th " " | 14 13 | 10·50 |
| 1st April " | 14 38 | 13·17 |
| 8th " " | 14·50 | 11·42 |
| 15th " " | 14 75 | 10·75 |
| 22nd " " | 15 08 | 10·58 |
| 29th " " | 15·50 | 12 33 |
| 6th May " | 16 25 | 12 33 |
| 13th " " | 17 08 | 12 42 |
| 20th " " | 17 00 | 12 25 |
| 27th " " | 16 88 | ..... |
| 3rd June " | 17·00 | 12·38 |
| 10th " " | 17·38 | 14 75 |
| 17th " " | 17·50 | 14 75 |
| 24th " " | 17 25 | 15 00 |
| 1st July " | 17·38 | Dried. |
| Average for 1887 | 15·76 | 12 25 |
| Average for 1886 | 10·14 | 4 11 |

## AJMERE SUB-DIVISION.

*Forest Revenue for the year ending 31st March 1888.*

| Budget Heads. | Mohwabir and Madar-pahar. | Taragarh Valleys. | Nag-Pahar. | Srinagar. | Bajesi. | Danta. | Bajgarh. | Makerwali Hookran. | Shikast Masjid. | Ajmere Nursery. | General. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. |
| II*b*.—Fire-wood and Charcoal . . . | 380 0 0 | 44 0 0 | 323 13 9 | 62 2 0 | 55 8 0 | 79 8 0 | 50 8 0 | 21 8 0 | 15 0 0 | 2 10 0 | ..... | 1,034 9 9 |
| II*c*.—Bamboos . . . . . | ..... | 0 6 3 | 0 12 0 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 2 3 |
| II*d*.—Grazing and Fodder grass . . . | 921 10 0 | 170 5 6 | 1,248 7 0 | 587 11 6 | 303 6 0 | 196 12 4 | 426 8 0 | 388 14 0 | 39 0 0 | ..... | ..... | 4,282 10 4 |
| II*e*.—Other minor produce . . . . | 5 8 0 | 16 0 0 | 140 6 3 | 45 14 0 | ..... | ..... | ..... | ..... | ..... | 1 0 0 | ..... | 208 12 3 |
| V*a*.—Fines and forfeitures . . . . | 59 12 0 | 33 8 0 | 89 10 0 | 57 6 6 | 3 3 0 | 14 5 0 | 7 4 6 | 44 9 0 | ..... | 40 8 0 | ..... | 350 2 0 |
| V*c*.—Other sources . . . . . | 17 0 0 | 13 8 0 | 6 8 0 | 60 0 0 | 35 12 0 | 52 0 0 | 51 10 0 | 16 4 0 | ..... | 65 0 0 | 9 2 1 | 326 12 1 |
| Total . | 1,383 14 0 | 277 11 9 | 1,809 9 0 | 813 2 0 | 397 13 0 | 342 9 4 | 535 14 6 | 471 3 0 | 54 0 0 | 109 2 0 | 9 2 1 | 6,204 0 8 |

## *Forest Expenditure for the year ending 31st March 1888.*

| Budget Heads | Mohwabir and Madar Hill. | Tarnagarh Vanitya. | Nag-Phalar | Sunagar. | Rajna | Danta | Bajrath. | Makerwali Hookran | Shikast Masjid | Ajmere nursery | General. | Total. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | R a p. | R a p | R a. p | R a p | R a. p | R a. p | R a. p. | R a. p. | R a p | R a p | R a p. | R a. p | R a. p. |
| **A.—Conservancy and Works.** | | | | | | | | | | | | | |
| Ie.—Grass and Minor produce | | .. | . | 49 10 3 | . | . | ... | .. | . | | ... | 49 10 3 | |
| VIb.—Feed and keep of Cattle | ... | .. | 17 11 8 | | . | .. | | .. | | 19 1 3 | . | 36 12 11 | |
| VIc.—Purchase of Stores, &c. | | ... | ... | 0 5 9 | ... | . | 0 7 0 | .. | | | 19 2 3 | 19 15 0 | |
| VIIa.—Roads and Bridges | | ... | . | 36 2 10 | . | | | | | | | 36 2 10 | |
| VIIb.—Buildings | | 5 0 0 | . | 16 14 3 | .. | ... | 70 0 0 | ... | .. | | 6 6 0 | 92 1 3 | |
| VIIc.—Other Works | 118 13 0 | | | .. | .. | 15 4 10 | | . | . | 6 0 6 | . | 140 2 4 | |
| VIIIa.—Demarcation | 0 4 0 | 0 6 0 | 0 4 0 | .. | .. | . | | 8 2 0 | | | | 9 0 0 | |
| VIIIc.—Survey | 0 10 0 | . | 1 7 6 | . | . | . | | 2 3 0 | | | | 4 4 6 | |
| VIIId. Pay of mahs | ... | ... | 274 13 9 | 117 0 1 | ... | 82 2 2 | 1 10 0 | .. | 51 11 11 | 131 8 0 | | 658 12 11 | 1,036 12 11 |
| VIIId. Watering apparatus | | . | 142 11 0 | 4 9 0 | . | 4 4 0 | | | . | 8 4 6 | | 59 12 6 | |
| VIIId. Planting trees | 62 0 0 | .. | 0 12 0 | 21 5 0 | . | 19 3 3 | 1 4 0 | 5 5 0 | 1 8 0 | 15 6 0 | . | 129 11 3 | |
| VIIId. Sowing seed | 2 4 6 | .. | 1 4 6 | 29 0 9 | . | 0 5 0 | 3 0 0 | 70 12 9 | ... | .. | 81 11 9 | 188 7 3 | |
| VIIIe.—Fire Protection | | 14 9 2 | 24 10 2 | | 46 0 6 | 19 3 11 | 10 10 0 | ... | . | .. | .... | 115 1 9 | |
| VIIIf.—Other works | 15 4 0 | 27 2 0 | 14 12 10 | 8 5 11 | | 25 5 3 | . | 113 7 9 | .. | ... | . | 204 5 9 | |
| IXa.—Refund | . | ... | . | | .. | ... | ... | .. | ... | ... | 6 4 0 | 6 4 0 | |
| IXc.—Other charges | .. | ... | 1 14 0 | | .. | . | | ... | | | 5 6 0 | 6 4 0 | |
| Total | 199 3 6 | 47 1 2 | 47 5 5 | 283 [illegible] 1 | 46 0 6 | 165 12 5 | 86 15 0 | 199 14 6 | 53 3 11 | 183 4 3 | 112 14 0 | 1,757 0 6 | |
| **B.—Establishments.** | | | | | | | | | | | | | |
| Ib.—Pay of Superior Officer | .. | ... | .. | ... | ... | . | . | .. | ... | . | 5,146 7 3 | 5,146 7 3 | |
| Ic.—Pay of Subordinate Forest Establishments | 154 0 8 | 160 14 2 | 161 7 2 | 425 12 0 | 71 11 0 | 155 13 7 | 165 2 11 | 70 6 1 | ... | ... | 194 8 10 | 1,559 12 5 | |
| Id.—Pay of Office Establishment | .. | .. | . | | ... | .. | .. | .. | .. | | 1,097 11 2 | 1,097 11 2 | |
| IIb.—Travelling allowance of Superior Officers | .. | ... | . | .. | ... | .. | | . | | | 1,069 5 8 | 1,069 5 8 | |
| IIa.—Travelling allowance Office Establishment | | ... | .. | | .. | .. | | .. | . | | 2 8 8 | 2 8 8 | |
| IIIa.—Stationery | | .. | ... | ... | ... | .. | .. | | | | 14 9 9 | 14 9 9 | |
| IIIb.—Carriage of tents, &c | | | ... | ... | ... | .. | .. | . | .. | . | 90 11 11 | 90 11 11 | |
| IIIc.—Rents | | . | ... | ... | . | . | | . | ... | .. | 182 10 0 | 182 10 0 | |
| IIIe.—Official postage | . | . | ... | . | .. | ... | . | ... | .. | .. | 78 14 0 | 78 14 0 | |
| IIIf.—Sundries | | ... | ... | | .. | .. | . | . | ... | ... | 215 12 4 | 215 12 4 | |
| Total | 154 0 8 | 160 14 2 | 161 7 2 | 425 12 0 | 71 11 0 | 155 13 7 | 165 2 11 | 70 6 1 | ... | .. | 8 093 3 7 | 9,458 7 2 | |
| GRAND TOTAL | 353 4 2 | 207 15 4 | 540 12 7 | 709 1 10 | 117 11 6 | 321 10 0 | 252 1 11 | 270 4 7 | 53 3 11 | 183 4 3 | 8,206 1 7 | 11,215 7 8 | |

# MERWARA SUB-DIVISION.

*Forest Revenue for the year ending 31st March 1888.*

| Budget Heads. | Chang. | Hattun and Sheopura. | Beliawas. | Todgarh. | Dilwara and Chang Birs. | Anepahar. | Borwar Kotra. | Dewair. | Amner. | Banjari Mandian. | Beawar Nursery. | General. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. | R a. p. |
| Ib. Firewood and charcoal | 2,883 10 10 | ... | ... | 236 1 3 | ... | ... | ... | ... | ... | ... | ... | ..... | 3,119 12 1 |
| IIa. Timber | 10 0 8 | 2 2 0 | 25 9 5 | 23 3 8 | ... | 3 0 0 | 35 9 9 | ... | 1 8 9 | ... | ... | ..... | 101 2 3 |
| IIb. Firewood and charcoal | 378 5 0 | 4 9 0 | 442 8 3 | 334 6 0 | 5 0 0 | ... | 32 2 0 | ... | ... | ... | 7 9 0 | ..... | 1,204 7 3 |
| IIc. Bamboos | ..... | ... | ... | 51 10 6 | ... | ... | ... | ... | ... | ... | ... | ..... | 51 10 6 |
| IId. Grass and Grazing dues | 259 13 0 | 254 10 6 | 179 0 0 | 683 15 0 | 207 6 0 | 190 3 6 | 402 15 0 | 307 1 8 | 316 10 0 | 439 12 0 | ... | ..... | 3,241 6 8 |
| IIe. Minor produce | ..... | 2 0 0 | 2 10 0 | 19 0 6 | ... | ... | ... | 35 13 6 | ... | ... | 50 7 0 | ..... | 109 15 0 |
| Va. Fines and forfeitures | 6 2 9 | 15 10 6 | 7 3 6 | 99 8 9 | 14 13 0 | 6 10 0 | 8 7 9 | 20 8 9 | 10 12 0 | 45 2 6 | 12 3 9 | 2 9 9 | 249 13 0 |
| Vc. Other sources | 2 12 0 | ... | ... | ..... | 4 0 0 | ... | ... | ... | ... | ... | 4 0 0 | ..... | 10 12 0 |
| TOTAL | 3,540 12 3 | 279 0 0 | 656 15 2 | 1,447 13 8 | 231 3 0 | 199 13 6 | 479 2 6 | 363 7 11 | 328 14 9 | 484 14 6 | 74 3 9 | 2 9 9 | 8,088 14 9 |

## *Forest Expenditure for the year ending 31st March 1888.*

| Budget Heads. | Chang | Hattun and Sheopura. | Beluawas. | Todgarh | Dilwara and Chang Bira | Auspahar. | Borwar kotra. | Dewair. | Amner. | Banjari Mandlan. | Beawar Nursery. | General. | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | R a. p. | R a p. | R a. p | R a. p | R a. p. | R a. p | R a. p. | R a. p. | R a p | R a p. | R a p | R a. p. | R a. p. |
| **A —Conservancy and Works.** | | | | | | | | | | | | | |
| Ib. Firewood and charcoal | 1,452 3 0 | ... | ... | 188 1 8 | ... | .. | ... | ... | ... | ... | .. | ... .. | 1,640 4 [illegible] |
| II Produce removed by purchasers | ..... | ... | | .. ... | 0 2 0 | ... | ... | 7 0 0 | ... | .. | 0 2 0 | ..... | 7 4 0 |
| VIb. Feed and keep of cattle | ... .. | ... | ... | ..... | ... | ... | ... | .. | .. | . | 9 6 3 | ..... | 9 6 3 |
| VIc. Purchase of stores | ..... | .. | ... | ..... | | ... | ... | ... | ... | ... | ... | 1 8 0 | 1 8 0 |
| VIIa. Roads and bridges | 9 6 0 | .. | 48 13 0 | ..... | ... | ... | 1 14 0 | .. | ... | ... | . | .. | 60 1 0 |
| VIIb Buildings | 5 1 0 | 0 3 3 | 17 12 0 | ..... | .. | ... | ... | 1 0 0 | ... | ... | ... | 2 7 0 | 26 7 3 |
| VIIc. Other works | .. ... | ... | ... | 103 3 4 | 0 12 0 | ... | ... | ... | ... | .. | ... | 4 4 0 | 108 3 4 |
| VIIIa Demarcation | 0 8 0 | .. | ... | ..... | .. | ... | . | ... | ... | .. | ... | ... | 0 8 0 |
| VIIIc. Surveys | 1 14 0 | 0 6 0 | ... | .. .. | 0 2 0 | ... | 0 1 0 | ... | ... | ... | .. | . .. | 2 7 0 |
| VIIId. Pay of Malis | 82 6 2 | ... | ... | ..... | ... | .. | ... | ... | | . | 180 0 0 | ... | 262 6 2 |
| VIIId. Watering apparatus | 4 1 9 | ... | ... | . ... | ... | .. | .. | . | ... | .. | 11 11 6 | . | 15 13 3 |
| VIIId. Planting trees | 14 7 7 | ... | ... | 0 12 0 | ... | .. | . | 3 0 6 | ... | ... | 7 1 9 | 0 8 0 | 23 13 4 |
| VIIId. Sowing seed | 4 15 7 | .. | .. | | ... | .. | 17 4 2 | | . | | 5 3 6 | 12 15 3 | 40 6 [illegible] |
| VIIIe. Fire protection | 33 0 0 | 12 12 0 | 65 1 0 | 353 12 10 | ... | 56 7 0 | 32 9 6 | 22 11 10 | 32 5 11 | 21 7 6 | ... | ... . | 630 3 7 |
| VIIIf Other works | . .. | 122 15 0 | .. | 54 4 5 | 16 7 6 | ... | 147 6 10 | ... | 374 10 6 | 581 1[illegible] 2 | ... | . | 1,297 11 5 |
| IXc. Other charges | ... .. | . | ... | ... .. | .. | .. | ... | .. | . | .. | . | 1 10 6 | 1 10 6 |
| Total | 1,607 15 1 | 136 4 3 | 131 10 0 | 700 2 3 | 17 7 6 | 56 7 0 | 199 3 6 | 33 11 10 | 407 0 5 | 603 6 8 | 213 9 0 | 23 4 9 | 4,130 2 3 |
| **B —Establishment** | | | | | | | | | | | | | |
| Ic. Pay of Subordinate Forest Establishments | 330 8 8 | 143 13 11 | 187 0 0 | 552 9 7 | 73 13 3 | 132 8 3 | 190 0 9 | 401 15 1 | 83 11 8 | 137 11 1 | ... | 600 0 0 | 2,833 12 3 |
| Id Pay of Office Establishment | ... . | .. | ... | ... . | ... | ... | .. | . | .. | . | .. | 306 0 0 | 306 0 0 |
| IIc. Travelling allowance of Forest Subordinate Establishment | ... .. | ... | ... | ... .. | ... | ... | .. | . | ... | .. | ... | 221 10 0 | 221 10 0 |
| IId. Travelling allowance of Office Establishment | ... . | ... | .. | ..... | ... | .. | . | ... | . | ... | . | 32 2 7 | 32 2 7 |
| IIIa. Stationery | ..... | ... | ... | .... | ... | ... | ... | . | . | ... | ... | 16 15 3 | 16 15 3 |
| IIIb. Carriage of tents, &c. | ..... | ... | ... | ..... | ... | ... | ... | .. | ... | .. | ... | 120 0 0 | 120 0 0 |
| IIIf. Sundries | ... .. | ... | ... | ..... | ... | ... | ... | ... | .. | ... | ... | 21 6 9 | 21 6 9 |
| Total | 330 8 8 | 143 13 11 | 187 0 0 | 552 9 7 | 73 13 3 | 132 8 3 | 190 0 9 | 401 15 1 | 83 11 8 | 137 11 1 | ... | 1,318 2 7 | 3,551 14 10 |
| Grand Total | 1,938 7 9 | 280 2 2 | 318 10 0 | 1,252 11 10 | 91 4 9 | 188 15 3 | 389 4 3 | 435 10 11 | 490 12 1 | 741 1 9 | 213 9 0 | 1,341 7 4 | 7,682 1 1 |

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